

A PHILOSOPHICAL DELINEATION OF THE CONTRIBUTIONS
OF PHYSICAL EDUCATION TOWARD ATTAINING THE
BEHAVIORAL GOALS OF GENERAL EDUCATION

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CHAPTER I

INTRODUCTION

Some thirty years ago as the author entered the teaching profession of physical education, she felt a real challenge to the worthiness of trying to help individuals grow and develop as human beings through the physical education experience. The author pursued this field of the teaching profession, in spite of the stigma attached to women physical educators during this era, believing there were many attitudes, values, and understandings necessary to the education of "man" that could best be acquired through a planned, progressive, and meaningful physical education curriculum.

As a physical education professor in a liberal arts college for nineteen years, it was possible for the author to gain insight into the values of a general education interdisciplinary approach viewing man as a whole person. The student was considered first a "person", a future citizen of a democratic society, who would need knowledges, understandings, skills, and values that would be conducive to a meaningful life.

Some aspects of education and learning can be measured objectively but others do not lend themselves to such precision in measurement at the present time. Many educators, including the author, have often witnessed observable changes in student behavior, but have not found a way to objectively measure them. It is becoming more and more apparent that reflective thinking and logical clarification of the nature of

things known should also be essential concerns of educators if future college students are to have a meaningful general education.

With sincere concern for the undergraduate program of higher education and believing deeply in the need of a valuable general education, the researcher desired to take a serious look at the potential contributions of physical education toward attaining the behavioral goals of general education.

Twenty-five hundred years ago Aristotle very pointedly presented not only the dilemma in education of that period of history but a lasting problem throughout the centuries. He posed the same problems higher education is confronted with solving in this civilized world of today: Should specialization be emphasized in preference to general education? Do the colleges and universities have any responsibility to the moral and social development of the student? Do courses built upon practical skills and abilities have a justifiable place in the curriculum? Is it appropriate for specialization to be vocational in nature? The goal of education has always been a cloudy issue with the the things to be taught and the disciplines which would provide these learnings constantly vacillating.

As things are . . . mankind are by no means agreed about the things to be taught, whether we look to virtue or the best life. Neither is it clear whether education is more concerned with intellectual or moral virtue. The existing practice is perplexing in no one knowing on what principle we should proceed--should the useful in life, or should virtue, or should the higher knowledge be the aim of our training; all three opinions have been entertained. Again about the means there is no agreement: for different persons, starting with different ideas about the nature of virtue, naturally disagree about the practice of it.

-Aristotle, Politics, Book viii, chp. 2

In discussing philosophies of education, Brubacher spoke of the Greeks questioning whether the traditional educational stereotype would

be appropriate for the new kind of world they were creating.¹ Pullias says, "Man is engaged in a prolonged and urgent search for an education that will realize his full potential--this is appropriate to the complex needs and abilities of his nature as man."² These are broad and deeply rooted problems needing solution to discover what constitutes an effective education of man and the means by which it can occur. Throughout the history of education, philosophers and educators have searched for answers to these issues which have reoccurred with almost dulling frequency.

With the extreme changes in the world and society during the recent decades, higher education in the twentieth century is seriously confronted with discovering answers to these age-old questions of what should or what should not be taught in the schools to prepare the youth for living in this modern dynamic society. Americans are indicating a distinct concern about the outmoded nineteenth century ideas that are perpetuated in education. Formerly, a reasonably stable body of knowledge, skill, custom, and tradition which formed the material of instruction made the tasks of education much easier. However, the knowledge explosion of the twentieth century, the proliferation of new techniques, and the advancement of technology have created perplexing problems for education. Almost all of the inherited modes of thought and conduct are under challenge or have already been displaced. The upheaval in the political, economic, and social institutions of this nation have

¹John S. Brubacher, Modern Philosophies of Education (4th ed.; New York), p. 3.

²Earl V. Pullias, Search for Understanding (Dubuque, Iowa, 1965), p. 38.

contributed to the education dilemma.³

Colleges and universities are attempting to find sources for needed monies, to solve societal issues on campuses, to provide more services to communities and governments, to extend research programs, and to improve physical environmental conditions and programs for providing students with an atmosphere more conducive to learning. Some institutions of higher education are experimenting with broad program developments such as: undergraduate study-abroad programs, a variety of work and service programs, honors programs, and interdisciplinary and inter-class seminars. Dressel believes many of these innovations may be valuable; however, he said many of these programs are not confronting the difficult and perplexing issues related to the disciplines. The more problematic issues of course offerings and instruction in the basic disciplines need to be faced.⁴ Dressel further indicated that general education could be destroyed since the control over the curriculum has been lost by the central administration to the departments of graduate and professional schools resulting in early pressure on the student to select a vocation.⁵

Many educators still believe there needs to be a distinct concern for a more meaningful general education if the purposes of higher education are to be met. Students who have been able to go to college must

³Philip H. Phenix (ed.), Introduction, Philosophies of Education (2nd ed.; New York, 1962), p. 2.

⁴Paul L. Dressel, College and University Curriculum (Berkeley, Calif., 1968), chp. iv, pp. 57-89. Dressel provides a thorough discussion of the developments and trends in general education.

⁵Ibid.

be prepared to assume responsibility and leadership for solving the problems with which man is faced in the twentieth century. The Task Force of the White House Conference on Youth emphasized the fact that human and financial resources for providing an educational system directed toward preparing individuals to live a meaningful life in a rapidly changing society have been diverted by misplaced priorities.⁶

According to McGrath:

Never before in our national life has the demand for general and broad knowledge, combined with the capacity for independent intellectual activity, been so acute. The commanding social, political, economic, military, racial, and philosophical problems and issues now pressing for solution require of those who have had the advantages of a higher education, a breadth of knowledge, and informed judgment, and wide-ranging interests.⁷

The problem becomes one of determining what exactly should constitute the content of a general education; however, there is no unanimity among educators regarding this question nor as to the implementation of the program. Mayhew said the general education program should consist of "a common set of experiences to provide a common universe of discourse -- a common body of allusion, illustration, and principle -- necessary for people to communicate with each other and to share and use the same culture."⁸ Conflicting and contrasting values must be considered when making decisions as to course offerings for the general education

⁶White House Conference on Youth (Washington, D. C., 1971), p. 79.

⁷Earl J. McGrath, The Liberal Arts College and the Emergent Caste System (Teachers College, Columbia University, 1966), p. 8.

⁸Lewis B. Mayhew, Contemporary College Students and the Curriculum, SREB Research Monograph No. 14 (Georgia, 1969), p. 71.

program, and a course must be "useful to all people living in the last third of the twentieth century."⁹

The intent and purpose of the general education program has been relatively well agreed upon since B. Lamar Johnson stated the following goals of general education in 1952:

The general education program aims to help each student increase his competence in:

1. Exercising the privileges and responsibilities of democratic citizenship.
2. Developing a set of sound moral and spiritual values by which he guides his life.
3. Expressing his thoughts clearly in speaking and writing and in reading and listening with understanding.
4. Using the basic mathematical and mechanical skills necessary in everyday life.
5. Using methods of critical thinking for the solution of problems and for the discrimination among values.
6. Understanding his cultural heritage so that he may gain a perspective of his time and place in the world.
7. Understanding his interaction with his biological and physical environment so that he may better adjust to and improve that environment.
8. Maintaining good mental and physical health for himself, his family, and his community.
9. Developing a balanced personal and social adjustment
10. Sharing in the development of a satisfactory home and family life.
11. Achieving a satisfactory vocational adjustment.
12. Taking part in some form of satisfying creative activity and appreciating the creative activities of others.¹⁰

⁹Ibid.

¹⁰B. Lamar Johnson, General Education in Action (Washington, D. C., 1952), pp. 21-22.

These objectives are very similar to the goals for general education as established by the President's Commission on Higher Education in 1947.¹¹ The multiplicity of problems of how to accomplish these goals remains to be solved. Thornton said that such objectives are certainly not new in American higher education, but that "the novelty consists in their clear and explicit recognition and in the realization that students do not achieve them accidentally as a result of exposure to random selection from the hundreds of available courses."¹²

Dressel spoke of the necessity in curriculum planning of selecting and classifying knowledge into disciplines as well as understanding the disciplines and their interrelationships to facilitate integration, coherence, and unity.¹³ Carl Rogers emphasized the real urgency for educational systems to come to grips with the real problems of life and to prepare individuals "to live responsibly, communicatively, in a world of increasing international tensions, increasingly irrational nationalism," and "in a world in which ever-accelerating change is the dominant theme."¹⁴

Physical education "service" programs in many colleges and universities are being evaluated and re-evaluated as to their academic respectability. Many departments of physical education have been faced with justifying and defending the inclusion of physical education in the

¹¹Higher Education for American Democracy, A Report of the President's Commission on Higher Education (Washington, D. C., 1947), pp. 50-57.

¹²James W. Thornton, Jr., The Community Junior College (2nd ed.; New York, 1966), p. 200.

¹³Dressel.

¹⁴Carl R. Rogers, Freedom to Learn (Columbus, Ohio, 1969), p. vi.

general education program; and some institutions have already restricted or discontinued the requirement of physical education.

During the past few years, physical educators have shown a more intense and serious concern for the philosophy of physical education. The intent of the more scholarly sources has been to interpret physical education in the light of the broad philosophical spectrum for the purpose of justifying physical education in the various schools of philosophic thought. Some physical educators have begun to explore the real meaning of movement and its significance as an educational form of human experience; however, the writer has not been able to find any studies of the contributions of physical education to the behavioral goals of general education. There seems to be a more urgent need than perhaps ever before for physical educators to seriously examine and interpret what potential physical education can provide for meeting the needs and interests of the present and future undergraduate students. If physical education contributes to the behavioral goals of general education, and if general education has a direct relationship to the purposes of higher education, then the potential benefits of physical education should reflect the nature of man and how he learns. Therefore, it would seem useful to examine some basic assumptions about man and the role of learning, to examine and determine an authoritative source for the goals of general education in higher education related to the accepted concept of man, and finally, to pursue the possibilities of physical education in realizing those goals.

Statement of the Problem

The purpose of this investigation is to philosophically delineate

the contributions of physical education toward attaining the behavioral goals of general education in the undergraduate curriculum.

Significance of the Study

It would seem very important for all educators to examine their discipline periodically in as many ways as possible to provide a clearer understanding of its contribution to man in the larger educational environment in which it exists. The physical contributions of activity are being studied extensively, but there appears to be a need for more investigations of values other than those classified as purely "physical" resulting from participation in the physical education program.

If a clearer relationship between the behavioral goals of physical education and those of general education in the undergraduate curriculum can be shown, the role of physical education in the general education program may be better understood and accepted by those outside of the discipline. Such a delineation could lead physical educators to make a closer examination of the undergraduate college physical education experience and to make certain their programs are more relevant to the general education program.

Qualifications of Investigator

The philosophical method of research is a subjective process with no precise mathematical measurement technique. Since this method of research relies heavily on the integrity, experience, and insight of the researcher, it seems important to point out the investigator's qualifications for pursuing this method:

- 1 B. S. degree in Health and Physical Education. Master of Education with specialization in Effective Teaching.
2. Twenty-five years of teaching experience:
 - a. three years - elementary schools
 - b. three years - junior-senior high schools
 - c. nineteen years - undergraduate liberal arts college (teaching included courses in Methods of Teaching, Curriculum Development, and Organization and Administration of Physical Education Programs).
3. Chairman of the women's program in the Division of Health, Physical Education, and Recreation at Phillips University for fifteen years. Responsible for developing the "applied" physical education program for all men and women students, the Health and Physical Education Teacher Certification program for men and women majors, and the intramural and extramural program for women students.
4. Member of the Phillips University Curriculum and Educational Policies Committee for ten years. Served two years on subcommittee to study and recommend changes in General Education Program.
5. Member of the committee appointed by the State of Oklahoma Curriculum Improvement Commission to prepare a physical education guide for grades K-12.

Limitations of Study

The study was only concerned with the instructional activity (applied or service) program of physical education in the general education curriculum for the undergraduate student in higher education.

Definition of Terms

The definitions of terms are taken from individuals well known in their fields of specialization and have been accepted by the researcher for the purpose of this study.

I. The Nature of Man

Man needs to keep clearly before him the fact of the uniqueness of the human self or person. Interpretations of life that make man merely a physiochemical object, a physiological mechanism, or an unselfconscious animal are at best partial truths. It is true that man has a physical and chemical nature, that he is propelled by electronic and cellular forces, and that he can live on the animal level. But there is an "I" or a selfconscious aspect that may transcend or rise above the given order of uncontentative nature. . . . Man is a being who can bring his appetites and habits under the control of a consciously established purpose.¹⁵

II. Learning

Learning is the process by which an activity originates or is changed through reacting to an encountered situation, provided that the characteristics of the change in activity cannot be explained on the basis of native response tendencies, maturation, or temporary stages of the organism (e.g., fatigue, drugs, etc.).¹⁶

III. Role of Learning

Learning is both a process and a product, and learned

¹⁵Harold H. Titus, Living Issues in Philosophy (4th ed.; New York, 1964), p. 159.

¹⁶Ernest D. Hilgard, Theories of Learning (2nd ed.; New York, 1956), p. 4.

responses make up the greatest part of man's behavioral repertoire, "any idea or object derives its qualities and has meaning only in relation to other components of the total situation."¹⁷ In addition, "reality is the meanings which the individual acquires as he interacts with his environment."¹⁸ The learner's perceptions, insights, and cognitions are relied on largely for drawing inferences.

IV. Behavioral Goals

Stated aims or purposes which are learner-oriented and designed to bring about a change in cognitive, affective, or psychomotor behavior.¹⁹

V. Principles

"General concepts based either upon pertinent scientific facts or upon philosophic judgment that arises out of insight and/or experience."²⁰

VI. General Education

General education refers to programs of education specifically designed to prepare young people for the responsibilities that they share in common as citizens of a free society and for wholesome and creative participation in a wide range of life activities. It is that part of education which prepares the student to assume his roles as an individual, as a member of a family, and as a citizen. While it may contribute to his choice of occupation and to his success as a worker, vocational skills are not its

¹⁷Hugh V. Perkins, Human Development and Learning (Calif., 1969), p. 343

¹⁸Ibid.

¹⁹H. H. McAshan, Writing Behavioral Objectives (New York, 1970), pp. 15-19.

²⁰Jesse F. Williams, The Principles of Physical Education (8th ed.; Philadelphia, Pa., 1964), p. 16.

main objective. It is called 'general' because its purposes are conceived to be common to all men; it is that part of the total collegiate offering which is concerned with men's likenesses rather than with their divergent interests. It intends to assist the student to feel intellectually and psychologically at home in a world which makes new economic, social, civic, physiological, spiritual, and intellectual demands upon him.²¹

VII. Behavioral Goals of General Education

1. Exercising the privileges and responsibilities of democratic citizenship.
2. Developing a set of sound moral and spiritual values by which he guides his life.
3. Expressing his thoughts clearly in speaking and writing and in reading and listening with understanding.
4. Using the basic mathematical and mechanical skills necessary in everyday life.
5. Using methods of critical thinking for the solution of problems and for the discrimination among values.
6. Understanding his cultural heritage so that he may gain a perspective of his time and place in the world.
7. Understanding his interaction with his biological and physical environment so that he may better adjust to and improve that environment.
8. Maintaining good mental and physical health for himself, his family, and his community.
9. Developing a balanced personal and social adjustment.
10. Sharing in the development of a satisfactory home and family life.
11. Achieving a satisfactory vocational adjustment.
12. Taking part in some form of satisfying creative activity and in appreciating the creative activities of others.²²

²¹Thornton, Jr., p. 198.

²²Johnson, pp. 21-22.

VIII. Physical Education

Physical education currently is defined as the art and science of voluntary, purposeful human movement. Its central concern is man engaging in selected motor performances and the meaning and significance of these experiences. Thus, physical education is a broad cross-disciplinary subject.²³

Design and Methodology

II. Methodology:

A philosophical delineation is a verbal description searching for truth through logical reasoning rather than factual observation. This involves utilization of authentic works of writers, accepted principles, and criteria or standards of judgment for purposes of examining, explaining, and showing relationships. According to Nagel:

For although there does not seem to me to be any subject matter that is distinctively and inherently philosophical, there is a large if vaguely demarcated class of questions, many of which arise in connection with every specialized subject matter, that are generally regarded as being characteristically philosophical. They are so regarded not simply because they happen to be discussed for the most part by those who are philosophers by profession, since in point of fact such questions are frequently pursued by thinkers in almost every domain of professional activity. The questions are held to be philosophical because they deal with foundational problems and more specifically with foundational problems of knowledge--with the analysis of ideas central to some particular area of thought as well as with the general conditions under which discourse is meaningful; with the grounds of beliefs dominating some department of inquiry as well as with the logic implicit in evaluating the worth of evidence; or with the relations of one branch of knowledge to some other branch as well as with the general principles

²³ John Nixon, "Preface", The Social Matrix of Physical Education by Celeste Ulrich. (New Jersey, 1968), p. vii.

presupposed in integrating the conclusions of specialized inquiries into a unifying perspective upon the diverse materials of human experience.²⁴

The writer used the philosophical method of research for investigating the problem. Eleanor Metheny provided the following explanation of this form of research:

The philosophical method for approaching a problem involves identification of basic assumptions being made about the universe in which the problem exists; recognition of general principles which provide a rational explanation of the behavior of phenomena within that universe; and interpretation of observations or 'facts' about the phenomena in the light of general principles.²⁵

Researchers have been accumulating for years facts about man and his universe, but there remains "a vast part of human experience, artistic production, and thought which is not approachable by the factual method."²⁶ For this type of research, the philosophical method of critical interpretation, using insight, experience, and logic as its chief devices, has genuine value. Hillway provided the following guide for this method of research:

Three particular characteristics must be presented in critical interpretation. First, the argument must be based upon or at least agree with, known facts and principles in the field in which the study is being carried on. . . . Second, the arguments advanced in critical interpretation must be clear and reasonable--that is, they must follow logic. . . . The basic procedure in critical interpretation is reasoning, but this reasoning should be so impeccably honest and so thoroughly complete that the reader will be able to follow the argument without any difficulty and be impelled by it to accept the

²⁴Ernest Nagel, "Philosophy in Education Research," Educational Research, ed. Frank W. Ranghart (Indiana, 1960).

²⁵Eleanor Metheny, "Philosophical Methods," Research Methods in Health, Physical Education and Recreation, ed. M. Gladys Scott (2nd ed.; Washington, D. C., 1959), p. 483.

²⁶Tyrus Hillway, Introduction to Research (2nd ed.; Boston, Mass., 1964), p. 102.

scholar's conclusion. Third, critical interpretation is expected to result in some generalization or conclusion which follows from the reasoning which the scholar has done. . . . The chief danger to be avoided in this process is that of stating a conclusion which relies upon the scholar's intuitive or general impressions rather than upon specific and reasoned argument.²⁷

II. Procedure (The following procedure was used by the author in thinking through the study):

- A. The nature of man was explored and described according to the classical view as well as the modern interpretation in light of twentieth century factors.
- B. The definition and role of learning was developed in relation to the nature of man.
- C. A definition and the behavioral goals of the general education program in the undergraduate curriculum were derived. The role of learning based on the nature and the needs and interests of the undergraduate student was explored.
- D. The potential contributions of physical education toward attaining the goals of general education were critically investigated. The physiological, psychological, sociological, and philosophical implications for physical education based on the nature of man and the role of learning were interpreted on the basis of the needs of the undergraduate student in higher education.

CHAPTER II

THE NATURE OF MAN

The fundamental assumptions about the nature of man must be clearly understood before one can accept or develop learning theories. Since the time in Greek culture when Plato interpreted the maxim "Know thyself", men have been searching for answers to the questions of what is man, what can he become, and what is man meant to be.

Historically, three distinct interpretations have emerged: the classical or rationalistic view, the Judaeo-Christian view, and the naturalistic or biological view. Although there have been many combinations, divisions, modifications, and transformations of these views, the varying concepts of man have pervaded the culture influencing the manner in which an individual perceives himself and others and the way in which society views "expected" and "desirable" behavior.

The Classical View of Man

The classical view of man, inherited largely from Greece and Rome, was developed by Socrates, Plato, Aristotle, and their followers. This period of time was characterized by social unrest, war, violence, and political struggles, but there was a desire among the philosophers to establish peace and stability in the state.

The most distinguishing feature of the philosophy of this period was that man is a rational being with reason, the highest part of the

soul, functioning to guide conduct. Both Plato and Aristotle viewed reason as independent and immortal in its essential nature and capable of penetrating to the very nature of things. Reason was the characteristic of man which set him apart from subhuman animals. From the classical viewpoint, the ideal person was wise, the wise were virtuous, and ignorance was a result of wickedness. Plato's model was of the educated man, not universal man, and it only applied to those rare individuals who understood and appreciated the things that accompanied life and made it beautiful. Musical rhythm, graceful bodies, and excellent craftsmanship were considered by Plato to be manifestations of the underlying harmony of the universe.¹ Plato's views of the nature of man were basically pessimistic, as he said in his Epistle VIII, "the condition of most men's souls in respect to learning and of what are termed 'morals' is either naturally bad or else corrupted."² In further elaboration of his view of man, Plato stated in *The Republic*:

Whereas, our argument shows that the power and capacity of learning exists in the soul already; and that just as the eye was unable to turn from darkness to light without the whole body, so too the instrument of knowledge can only by movement of the whole soul be turned from the world of becoming into that of being, and learn by degrees to endure the sight of being, and of the brightest and best of being, or in other words, of the good.³

Plato and Aristotle distinguished the mind from the body by identifying the mind as the unifying and organizing principle of man.

¹Paul Nash, Models of Man (New York, 1968), p. 9. Nash portrays most of the influential models of the educated persons in the Western cultural tradition with selections from some of their writings.

²Ibid., p. 25.

³Ibid., pp. 18-19

They believed the harmonious development of all of man's functions and capabilities through the supremacy and the perfection of reason in man and society is the goal of human effort and the meaning of progress toward excellence.⁴

In Nicomachean Ethics, Aristotle referred to man as a rational being "who behaved in accordance with the dictates of reason to become "the good and happy man." Therefore, if education was focused upon rational contemplation (as this is the highest form of activity), man would become virtuous and happy.⁵ Aristotle provided man with the view of the liberally educated person as one prepared in the professional studies, but also prepared to enjoy leisure. In Politics, Aristotle developed the idea that man finds self-realization through leisure, and work is done in order to free oneself for leisure. This concept became the genesis for the liberal-vocational dichotomy which has persisted throughout educational thought.⁶

In his interpretation of the classical viewpoint of man, Oberteuffer said, "what is real is ultimately mental; that the universe is our all-including self--and that this self perceives, thinks, feels, and wills."⁷

⁴For an in-depth study of Plato, see Norman Gulley, Plato's Theory of Knowledge (London, 1962), and A. E. Taylor, Plato: The Man and His Work (London, 1955).

⁵Nash, pp. 37-48.

⁶Nash, pp. 49-53.

⁷Delbert Oberteuffer, "Idealism and Its Meaning to Physical Education," Philosophies Fashion Physical Education, ed. E. C. Davis (Dubuque, Iowa, 1963), p. 17.

The Judaeo-Christian View of Man

At the time of the barbarism and disintegration of the Roman Empire resulting from military defeats and internal decay, the Judaeo-Christian interpretations of the nature of man were predominantly shaped by St. Augustine who felt that man's uniqueness was not in his reason or in his relation to nature; but in that he was a spiritual being who transcended nature, and was created by and in God's image.

In the Judaeo-Christian tradition man is a creature of great worth capable of almost unlimited possibilities for good or evil. Man may be a sinner giving way to injustice, egotism, pride, or sensuality, but when he is devoted to God he becomes himself. This is a self which assumes responsibility for his own actions and attempts to please God.

St. Augustine's model of an educated man was presented as one who was knowledgeable in the Pagan studies (later to become the seven liberal arts) for the purpose of becoming closer to a love of the Christian God and his orderly universe which was inevitably perfect. This educated man, as described by St. Augustine, was a person who had been able to bring unity in his life between faith and reason because there had to be authority, control, and discipline to guide man's reason. In his Soliloquies, Augustine presented the many evil effects the body could have upon the soul and like the classicists, suggested the dichotomy of mind and body.⁸

⁸ Etienne H. Gilson, The Christian Philosophy of Saint Augustine, trans. L. E. N. Lynch (New York, 1960). This is an excellent source for in-depth study of the Judaeo-Christian view of man. See also Gilson's The Christian Philosophy of Saint Thomas Aquinas, trans. L. K. Shook (New York, 1956).

The Naturalistic or Biological View of Man

Although one finds variations in the modern scientific interpretations of man, the fact that man is a part of the physical order of nature and is subject to physical and chemical laws is generally accepted by all the sciences. Although man has many characteristics in common with other animals, he does have physical characteristics as well as social and cultural characteristics developed to a higher degree which differentiates him from the higher animals. The naturalistic or biological view of man is based upon objective facts as revealed by the various sciences which study man as a complexity of physical and chemical aspects or as species *homo sapiens* in the continuing process of evolution.⁹

Erich Fromm, a behavioral scientist, believes human nature is the subject of the science of man, although it does not start out with a complete or satisfactory picture of what human nature is. Fromm said that "a satisfactory definition of its subject matter is its aim, not its premise."¹⁰ According to Fromm, the method of the science of man is to observe the reactions of man to various individual and social conditions; then, inferences about man's nature can be made from observations of these reactions. Human nature is a theoretical construction which can be inferred from empirical study of the behavior of man; and according to Fromm, "the science of man is constructing a 'model of

⁹Harold H. Titus, Living Issues in Philosophy (4th ed.; New York, 1964), chp. vi and ix. Titus presents the various systems of thought (points of view) in relation to the living issues facing man today in a clear and readable style.

¹⁰Erich Fromm, Man for Himself (3rd ed.; New York, 1966), p. 32.

human nature' is no different from other sciences which operate with concepts of entities based on, or controlled by, inferences from observed data and not directly observable themselves."¹¹

Variations of the Three Views as Stated by Outstanding Individuals

Particular individuals stand out for their development of variations of the three traditional interpretations which have had extensive influence on contemporary Western thought. In response to the changing conditions brought about by the rise of the new bourgeoisie and new science during the seventeenth century in England, John Locke began questioning the traditional, social-political patterns and the customary modes of inquiry. He contributed substantially to the democratization of the existing gentleman ideal using behavior for the major criterion rather than birth. Locke stressed individualism and viewed the educated man as one who could make autonomous decisions. His solution to the problem of avoiding the stagnation of unreflective thinking and the problems of radicalism was science, reason, and experience.¹²

In reaction to the excessive formalism and rationalism of eighteenth century France, Jean Jacques Rousseau created a model of the educated person known as "the natural man".¹³ Rousseau, French writer and educator, advocator of the doctrine of democracy and equality, believed human nature was good but human society was evil. He particularly stressed that as civilization advanced, man deteriorated. Rousseau

¹¹Ibid., p. 33.

¹²Kingsley Price, "Locke," chp. vii, pp. 251-321. See also Paul Nash, "The Gentleman: Locke," chp. ix, pp. 233-259.

¹³Paul Nash, "The Natural Man: Rousseau," chp. x, pp. 259-282. See also Kingsley Price, chp. viii, "Rousseau," pp. 324-392.

felt that children should have an opportunity to develop their innate goodness by growing up in a state of "natural simplicity" uncorrupted by society. The unique and spontaneous inner impulses of the child were to be respected and nurtured; likewise, standards of tastes and discrimination were to be raised. Rousseau proposed that if man understood the innate principles that governed nature, man, and society, and if he functioned in harmony with them, an ideal society would result.

Johann Heinrich Pestalozzi, a Swiss educational reformer, believed that man had the potentiality of goodness given him by God and nature, and that this potential should be fully developed, and the individuality of each person should be preserved. Pestalozzi viewed education as emphasizing moral instruction, encouraging children to absorb knowledge through sensory experiences, and relating all instruction with the learner's own experience and observation.¹⁴

As a spokesman for England during the early nineteenth century scientific and industrial revolution, Sir Julian Huxley provided a humanistic view of a man in evolution, a cultural animal with not only intellectual capacities but emotional and aesthetic capacities. Huxley asserted that the role of arts and skills and rituals and religious experiences were important in human evolution. Huxley stated that, "Man's evolution is not biological but psychosocial; it operates by the mechanism of cultural tradition, which involves the cumulative self-reproduction and self-variation of mental activities and their products." ¹⁵

¹⁴Louise Antz, "Johann Heinrich Pestalozzi, " The Encyclopedia Americana, XXX (New York, 1960), p. 654.

¹⁵Julian Huxley, "The Evolutionary Vision," Evolution After Darwin, ed. Sol Tax (Chicago, 1960), p. 251.

Pierre Teilhard de Chardin, a renowned paleontologist and French Jesuit, was a friend of Julian Huxley who shared many of his views of the evolutionary process, but provided a Christian viewpoint. In his book, The Phenomenon of Man, Teilhard stated, "this book deals with men solely as a phenomenon; but it also deals with the whole phenomenon of man."¹⁶ Teilhard de Chardin believed that what man is and what he is to be can only be understood in relation to his history as it is interwoven with his worldly surroundings. He identified as the basic characteristic of man, "his gift of awareness in the second degree. Man not only knows; he knows that he knows."¹⁷

Teilhard's vision of God was deeply related to his vision of nature and the world. He believed the world to be one world with everything linking together to form a whole. God was everywhere and in all things, the very essence of being. This perspective provided a deeper meaning to the Christian interpretation of evolution.

The concept of man as an economic man was espoused by Karl Marx, the ideological founder of international Communism. Marx fundamentally believed that man, rather than being fully human, was an alienated dehumanized being. In The German Ideology, Marx wrote,

As individuals express their life, so they are. What they are, therefore, coincides with their production, both with what they produce and how they produce. The nature of individuals thus depends on the material conditions of this production.¹⁸

¹⁶ Pierre Teilhard de Chardin, The Phenomenon of Man (New York, 1961), p. 29.

¹⁷ Ibid., p. 133. (According to this philosophy, richer fulfillment for the individual and personalization came as a result of man, society, and culture being unified.)

¹⁸ Karl Marx, and F. Engels, The German Ideology (New York, 1939), p. 7.

Marx discussed the many ways in which man exploits man, and that it is constant exploitation which causes dehumanization. He spoke of man being utilized as a commodity and valued only in terms of his usefulness in the productive process. Marx identified money and the drive for self-aggrandizement as a major cause of the self-alienating process. The division between physical and mental labor and the consequent origin of private property contributed to man's alienation.¹⁹ As Marx envisioned the New World, man would live a non-acquisitive life. The workers would unite to overthrow the despotism of capitalism, and private property would be abolished or expropriated. Marx believed this would bring a radical reversal of man's condition which would allow him to appropriate human nature and recover his human freedom. Then, and only then, according to Marx, would man be released to enjoy his productive potentialities.²⁰

The founder of psychoanalysis, Sigmund Freud, helped change the interpretation of man in the twentieth century as he formulated the "psychological man", the man without illusions about himself or about his world. He believed that if man lived by practical insight it would be possible for him to gain understanding concerning his own personality.²¹

Freud was convinced that what he termed "unconscious processes", over which man had no control or of which they had no knowledge, were

¹⁹Perry LeFevre, Understandings of Man (Philadelphia, Pa., 1966), chp. iv, pp. 63-75.

²⁰Karl Marx, "The Economic and Philosophical Manuscripts of Karl Marx," Marx's Concept of Man, by E. Fromm (New York, 1961), pp. 95-138.

²¹LeFevre, pp. 76-77.

determinants of man's behavior. He explained that man's inner life was a constant battle of two contending forces, the pleasure principle and the reality principle. According to Freud, "man struggles between egoistic and altruistic urges, between the goal of personal happiness and that of community with others."²² Self-preservation and the sexual instinct were identified by Freud as the two greatest drives in human life.

During the nineteenth century, a Dane by the name of Soren Kierkegaard laid the foundation for the movement known as "Existentialism" which has had great impact on philosophical thought since the turn of the century. Kierkegaard described man as not being fully human because they had not become "individuals", selves with integrity, passion, and freedom. He felt that this process of realization of personal existence was something that was very individual. It occurred within the person and could go on apart from, and in spite of, all external factors such as the political and social movements of the day. Full personal existence entailed becoming a "Christian"; and that this was a goal toward which man was constantly striving but never possessed except in the moment that he acknowledged God as God.²³

The influence of Kierkegaard may be found in Western philosophical and theological thought of the twentieth century in the works of such

²²Nash, p. 342.

²³Soren Kierkegaard, The Point of View (New York, 1962), pp. 109-151.

men as Bruner, Niebuhr, Tillich, and Buber.²⁴ These were among the ones who strongly reacted against the scientific view of man which they felt did not permit understanding man as a whole, unique being, but instead, viewed him as an object to be categorized, objectified, and generalized. For the existentialist there was no "model man" but a man of infinity with a choice to do, to believe, and to accept something as true.

It appears that much of the Christian thinking has been influenced by Martin Buber, and evidences of his ideas are seen in modern educational philosophy. Buber provided an existential man as a model; man was a unique person which could not be categorized. To be an educated person, principles and traditions had to have meaning; however, they served as reminders rather than as infallible guides.²⁵

Buber spoke of man being oriented to his world in both an "I-Thou" and on "I-It" relationship. Buber's inquiry led him to an analysis of the distinctions between the categories of I-Thou and I-It as the world to be met and the world to be used. The "I-Thou" relationship existed for itself and was a mutual one; but the "I-It" relationship existed only one way as that of a subject to an object. Buber believed both relationship were necessary for human fulfillment; however, if the "I-it" relationship were dominant, which he called a life of "monologue", man's life would be impoverished. The life of "dialogue"

²⁴For further reference, see the following authors and their works: J. S. Bruner, The Process of Education (Cambridge, 1961); Reinhold Niebuhr, The Nature and Destiny of Man, I-1941, II-1943 (New York); Paul Tillich, "Existential Philosophy," Journal of the History of Ideas, V (January, 1944), pp. 44-70; Martin Buber, Between Man and Man (London, 1947).

²⁵Martin Buber, "Elements of the Interhuman," Models of Man, Paul Nash (New York, 1968), p. 442.

demanded inner unity, authenticity and honesty in responses, and full recognition of the uniqueness of individuals. Buber stated in one of his lectures:

..... the dynamic glory of the being of man is first bodily present in the relation between two men each of whom in meaning the other also means the highest to which this person is called, and serves the self-realization of this human life as one true to creation without wishing to impose on the other anything of his own realization . . .²⁶

Buber believed genuine dialogue depended upon "being" rather than "seeming", and it demanded real courage to be oneself in relationships with others.

John Dewey saw man as one in interaction with environment rather than as an isolated individual. In his "Pedagogic Creed", Dewey stated:

I believe that the individual who is to be educated is a social individual and that society is an organic union of individuals. If we eliminate the social factor from the child, we are left only with an abstraction; if we eliminate the individual factor from society, we are left only with an inert and lifeless mass.²⁷

The pragmatism of C. S. Pierce and William James seems to have influenced Dewey's development of the educated man as the "reflective man". This man, Dewey believed, preferred the scientific method of inquiry to solve problems and was very critical of the authority of custom and tradition as the determinant of belief and action. The "reflective man's" behavior was characterized by the intellectual habits of open-minded inquiry and responsible, experimental action. Such intellectual habits were moral attributes to Dewey. He did not believe there was such a thing as a "universal human nature". Instincts and

²⁶ Buber, p. 444.

²⁷ John Dewey, "My Pedagogic Creed," The School Journal, LIV (January 16, 1897), pp. 77-80.

impulses were a part of man's native constitution, and these instincts and impulses were shaped by learned habits to find their direction and goals in whatever activities would provide adjustment for them from one place and time to another.²⁸ Dewey believed that man was not naturally intelligent or rational, and argued that intelligence consisted of a set of habits and dispositions which had to be very carefully and deliberately cultivated or they would gradually disappear. Dewey felt that men could lead more valuable and humane lives with the proper use of intelligence. He emphasized reconstructing or readjusting the environment for the purpose of making it and, consequently, one's own experience into something more ideal and valuable.²⁹

The major interpretations of models of men would be incomplete without considering the "planned man" as perceived by B. F. Skinner. Skinner very openly challenged the proposition that man was a free agent acting according to decisions of an inner self that could neither be explained or controlled by scientific methods. Man, as Skinner described him, operated within a wholly determined and orderly universe with all human behavior being externally caused and controllable. He considered scientific experimentation as the only reliable method for determining information about the nature of man; and believed man with a diversity of characteristics could be programmed to behave in ways that would achieve society's goals. According to Skinner, this was the "planned man of tomorrow" who would create the life for society.

²⁸Reginald D. Archambault, "Human Nature and Conduct," John Dewey on Education (New York, 1964).

²⁹For further reference, see John Dewey, On Experience, Nature, and Freedom (New York, 1960).

Irrational thinkers and antisocial individuals would be replaced by critical, rational, and creative thinkers.³⁰

An Evaluation of the Interpretations of Man

Although it was once possible to identify a fairly unified concept of man during a given historical period, at present there appears to be no dominant view of man since modern philosophy is a synthesis of ideas and ideals gleaned from the Graeco-Roman philosophers, the Judaeo-Christian beliefs, and from scientific thinkers.

The sciences have provided extensive and valuable theories about man; however, the rich qualities of the human personality can be neglected in scientific methodology which is strictly objective, impersonal, and quantitative. Scientific investigations tend to leave out most of the individuality of human nature and behavior although they have provided many facts and descriptive materials and have made predictions and observed trends which have improved the understanding of man. The behavioral sciences study man and his actions within his physical and social environment; however, it is difficult, if not impossible, to control experiments in human behavior since it is said, the only thing consistent about man is his "inconsistency". As Ulrich said,

Man can never be viewed as a simple biological organism. Man is not a machine. . . . Man cannot be viewed as a behavioral entity with no human relations and no societal direction. Man does not react to stimuli as a lone energy system, and human theory cannot be based entirely upon a stimulus-response bond. Man must be acknowledged as a social being - a creator and recipient of his cultural milieu. He always

³⁰Paul Nash, chp. xvi, pp. 407-434.

reacts in relation to his societal references, and he is never completely objective about his world.³¹

Even some of the behavioral scientists and philosophers in their attempts to be strictly empirical and objective have tried to avoid such concepts as "self", "self-consciousness", and "mind". Titus said that, "As the behavioral sciences succeed in their aim to become more like the natural sciences, they eliminate problems of meaning, value, and the knower, or self."³² Gordon W. Allport, a noted psychologist, stated:

Up to now the 'behavioral sciences', including psychology, have not provided us with a picture of man capable of creating or living in a democracy. These sciences in large part have imitated the billiard ball model of physics, now of course outmoded. They have delivered into our hands a psychology of an 'empty organism', pushed by drives and molded by environmental circumstance. What is small and partial, what is external and mechanical, what is early, what is peripheral and opportunistic - have received the chief attention of psychological system builders. But the theory of democracy requires also that man possess a measure of rationality, a portion of freedom, a generic conscience, appropriate ideals, and unique value Man talks, laughs, feels bored, develops a culture, prays, has a foreknowledge of death, studies theology, and strives for the improvement of his own personality. The infinitude of resulting patterns is plainly not found in caution when we extrapolate the assumptions, methods, and concepts of natural and biological science to our subject matter. In particular we should refuse to carry over the indifference of other sciences to the problem of individuality.³³

The "self" is the center of personal identity whether it be of materialistic or nonmaterialistic substance. This is the part of "I" or "me" which thinks, feels, perceives, wills, or decides and which is referred to by some as "soul", "spirit", "mind", or "ego". Whatever one

³¹Celeste Ulrich, The Social Matrix of Physical Education (New Jersey, 1968), pp. 10-11.

³²Titus, p. 153.

³³Gordon W. Allport, Becoming: Basic Considerations for a Psychology of Personality (New Haven, Conn., 1955), p. 100.

may call it, something supplies unity. The "I" is a unity of experiences which cannot be divided into neat, little separate compartments. In Rollo May's book, Man's Search for Himself, the author explained it this way, "the self is the organizing function within the individual. It is prior to, not the object of, our science, it is presupposed in the fact that one can be a scientist."³⁴ Perhaps the objective world may be experience, measured, and manipulated but it is the "self" that is doing the viewing. Carl Rogers said, "We cannot profitably deny our subjective life, any more than we can deny the objective description of that life."³⁵

The Greek view of man as a rational being is not complete since no one behaves consistently with reason guiding their conduct, and everyone is more than merely a rational being. The later Greek stress on the power of human mental faculties cannot be disregarded, nor can the Christian view which as Titus said "refuses to reduce personality to uncontrolled natural impulses or to conceive of it as perfect."³⁶ Although there is need for revision of many of the earlier theological conceptions of man, the writer agrees with the Christian emphasis on man as an individual whose life has meaning in a purposeful world. Society today needs to value the worth and dignity of each individual and recognize the need for love and social-mindedness in human relations.

Marx's interpretation of the "economic and communal man", Freud's

³⁴Rollo May, Man's Search for Himself (New York, 1953), p. 91.

³⁵Carl Rogers, "Some Issues Concerning the Control of Human Behavior", Science, CXXIV (November 30, 1956), p. 1064.

³⁶Titus, p. 148.

view of the "psychological man", Kierkegaard's description of the "existential man", and Skinner's conception of the "planned man" have provided us with many interesting and provocative theories, but this writer would classify them as rather narrow views. Examinations of human experience which are limited to one or only a few of its parts are lacking in completeness. It is true that the living organism may be analyzed, but life will not be found in any one of its parts. Life is the total organism - the quality of the whole cannot be found in any one of its parts.

The Nature of Man Accepted for This Study

The following modern concept of the nature of man as exemplified by the work of Harold H. Titus will be used for the model in this study because the author believes: in the uniqueness of the human self; that man is capable of intelligent, reflective behavior; that man is mind, spirit, and body functioning as a whole; and that each person has a distinct and meaningful role to play in life. Titus stated:

Interpretations of life that make man merely a physio-chemical object, a physiological mechanism, or an unself-conscious animal are at best merely partial truths. It is true that man has a physical and chemical nature, that he is propelled by electronic and cellular forces, and that he can live on the animal level. But there is an 'I' or a self-conscious aspect that may transcend or rise above the given order of unreflective nature. Any purportedly comprehensive interpretation of man that neglects or ignores his ideas and ideals, his self-consciousness, his power of abstract thought, his powers of ethical discrimination and aesthetic appreciation, and his need for worship and companionship is incomplete and inadequate. As a person, man is to some extent free from the limitations that hold for the inorganic and the merely organic but unselfconscious levels of existence. Man is a being who can bring his appetites and habits under the control of a consciously established purpose.³⁷

³⁷Titus, p. 159.

The writer believes that man has many potentials that are never realized, and that the real meaning to life is found as an individual strives to find happiness within himself and with others and seeks to achieve full realization of his capacities. Value judgments determine the actions of a person, and these judgments must be valid to him if he is to live a healthy and happy life. Man does not live by "bread" alone even though some things such as food and shelter are basic to sustenance. Man needs to feel that he is "going somewhere", to have a sense of enjoyment on the way, and to be himself and yet to be able to work with others in striving toward desired goals. Man finds significance in his existence by improving the quality of his life rather than simply acquiring or achieving the necessities of life.

CHAPTER III

THE ROLE OF LEARNING

Definition of Learning

Consciously or unconsciously an individual learns something new every day--facts, opinions, preferences--names and faces, a new way to prepare hamburger, what the astronauts found on the moon, how to put up a tent, how to paddle a canoe, or how to solve a problem. Sargent and Stafford stated, "Learning is almost synonymous with living"¹ because "learning" occurs from earliest infancy to old age, and it occurs in the home, in the school, at work, at play, and on the street.

Although a wide variety of definitions of learning have been proposed, there seems to be a common attempt by the psychologists to arrive at an explanation which is cognizant of the fact that something occurs within the individual which brings about a change or changes in behavior. Hilgard and Bower provided the following definition of learning:

Learning is the process by which an activity originates or is changed through reacting to an encountered situation, provided that the characteristics of the change in activity cannot be explained on the basis of native response tendencies, maturation, or temporary stages of the organism (e.g., fatigue, drugs, etc.).²

¹S. Stansfold Sargent and Kenneth R. Stafford, Basic Teachings of the Great Psychologists (Garden City, N. Y., 1965), p. 96.

²Ernest R. Hilgard and Gordon H. Bower, Theories of Learning (3rd ed.; New York, 1966), p. 2.

Hilgard and Bower indicated that the construction of an adequate definition of learning is most difficult because there are many activities and processes which should be included and some which should be excluded. It is quite possible to simply view learning as improvement with practice or benefiting from experience; however, all learning is not necessarily improvement nor is all learning desirable in its consequences. If learning is described as any change with repetition, it is possible to confuse it with other changes, such as growth and fatigue, which may occur with repetition.³

Hugh V. Perkins defined learning as a "universal, life-long activity wherein individuals modify their behavior in coping with and adapting to their environment,"⁴ and he indicated that learning is both a process and a product. Some of the processes which take place between the organism and his environment are "sensing, perceiving, feeling, symbolizing, remembering, abstracting, thinking, and behaving,"⁵ and the product is the resultant changed behavior (e.g., knowledges and understandings, attitudes, interests, motor skills).

Kinds of Learning

The kinds of things which an individual can learn are many. The ways in which he goes about learning these things are variable, and the time it takes him to learn them is specific to the individual and situation. Many things can be learned incidentally; however, according

³Ibid., p. 2.

⁴Hugh V. Perkins, Human Development and Learning (Calif., 1969), p. 335.

⁵Ibid., p. 336.

to Hill, most of the activities of human beings are learned.⁶ Examples of learning in physical education will be presented since this is the discipline of concern for this study and because there is so much misunderstanding about the potential for learning in physical education.

Some information is acquired through learning facts such as in a bowling class how to "pick up a split" or knock down a single remaining pin in the right or left hand corner. One may also learn to appreciate the beauty of a bowler approaching the foul line with poise, grace, and rhythm. The learner will be involved in the synthesis and application of knowledge in determining "where" and "how" he should deliver the bowling ball to get the desired results, the learner will develop preferences in the style of delivery, and the learner's feelings about himself are enhanced if he begins to move well toward the foul line and delivers an effective ball. Attitudes of respect for others and cooperation with others can be improved during the bowling experience. Adjusting one's behavior in order to be accepted by others rather than being an obnoxious annoyance can be a desirable learning outcome from bowling. As the learner's abilities improve, and as the learner gains a feeling of satisfaction and pleasure in his accomplishment, he may acquire interest in further improving his abilities and in using these abilities for recreation during his leisure time.

Educators tend to agree that any learning situation involves three kinds of learning--primary, secondary (or associated), and concomitant. Primary learning is basic or fundamental learnings, which in physical education would include the technical skills and fundamental concepts of

⁶Winfred F. Hill, Learning: A Survey of Psychological Interpretations (rev. ed.; Scranton, Pa., 1971), pp. 1-22.

each activity. Secondary or associated learning accompanies and assists primary learning, such as the selection and care of equipment for an activity and the rules and history of the game. Some learning is acquired concurrently with the primary and secondary learning which is of an attitude-shaping and character development nature. This is called concomitant learning and examples in physical education might be: self-discipline, personal integrity, honesty, sportsmanship, self-realization.⁷

It is important to emphasize that all three kinds of learning can be desirable or undesirable; and that, in a situation where the primary and secondary learning were considered desirable, concomitant learnings could be considered undesirable. Although there seems to be some disagreement in the world today as to what is "undesirable" or who decides what is "desirable", most individuals would agree that the Ten Commandments presented in the Holy Bible provide a desirable standard for behavior. In this Country, most middle-class values probably express that honesty is more desirable than dishonesty, and that good sportsmanship is preferable to being unfair, discourteous, or a poor loser or winner. Some learning is not desirable in its consequences, such as learning to pick pockets; however, the educator should be deeply concerned that as much desirable learning result from the school experience as possible. Hill said that "reaction as diverse as driving a car, remembering a pleasant vacation, believing in democracy, and

⁷Greyson Daughtrey, Methods in Physical Education and Health for Secondary Schools (Philadelphia, Pa., 1967), p. 143. See also Maryhelen Vannier and Hollis F. Fait, Teaching Physical Education in Secondary Schools (3rd ed.; Philadelphia, Pa., 1969), pp. 51-52.

disliking one's boss all represent the results of learning."⁸ In the process of learning knowledge and skills, the learner should be acquiring good habits and attitudes in preference to bad ones, and the learner should become aware of mistakes that have been unconsciously learned if he is to be able to correct them.

As a further example, in a physical education class a student might be engaged in learning to perform an ethnic dance (primary learning), learning the history of the dance (secondary learning), and learning the feeling of real joy in an aesthetic experience (concomitant learning). However, it must be understood that the student could be having a miserable experience in learning the dance which could cause personal humiliation with some loss of self-concept (concomitant learning). The student could be developing faulty movements or misinterpreting the historical background of the dance or experiencing a personal conflict with the teacher or a peer which would be undesirable learning.

Bloom and his associates in a study of the taxonomy of educational objectives classified learning into three different categories.⁹ The cognitive domain refers to the development of intellectual abilities and skills such as comprehension, interpretation, application, analysis, synthesis, and evaluation. The affective domain refers to the development of interests, attitudes, values, appreciations, and adjustments, and the psychomotor domain refers to the development of motor skills. It seems improbable for learning to occur in the cognitive domain without affective learning also resulting. In the process of developing any

⁸Hill, p. 1.

⁹Benjamin S. Bloom (ed.), Taxonomy of Education Objectives, Handbook I: Cognitive Domain (New York, 1956), pp. 201-204.

intellectual abilities and/or skills, an individual would be developing or changing interests, attitudes, and values. Again, it is important to note that learning can be desirable or undesirable.

Man is an integrated whole interacting physically, mentally, and socially with his environment. He does not attend an English class with only his mind, an art class with only his feelings, or a physical education class with only his body. If he is principally engaged in learning cognitions, it does not mean that he is only acquiring primary learning. The whole person is involved in the learning process; and primary, secondary, and concomitant learning are associated with any learning situation.¹⁰

The author believes this to be a critical issue in the approach to learning within the organized school structure. Learning experiences are usually built upon objectives directed toward achievement of primary and secondary learning, and it is entirely possible that the concomitant learning that is occurring may completely negate the value of the experience for the learner. Jerome S. Bruner stated that, "it matters not what we have learned. What we can do with what we have learned: this is the issue." He continued with the following recommendation:

Let us not judge our students simply on what they know. That is the philosophy of the quiz program. Rather, let them be judged on what they can generate from what they know--how well they can leap the barrier from learning to thinking.¹¹

Concomitant learning or learning of an affective nature has been

¹⁰ John Rowan Wilson and the Editors of Time-Life Books, The Mind, Life Science Library (New York, 1969), pp. 105-106.

¹¹ Jerome S. Bruner, "Learning and Thinking," Problems and Issues in Contemporary Education, Editors of the Teachers College Record (1960-1966) and the Editors of the Harvard Educational Review (1964-1966) (Glenview, Ill., 1968), p. 77.

relegated to a position of nonimportance by many educators because of the difficulty of determining such outcomes in a learning situation. At the same time, educators traditionally have tended to believe that an objective, factual knowledge test could be given, and the results would indicate if a student had learned. There is no real assurance of determining the full extent of what the student has gained in desirable learning even if he scores well on a test. It may indicate that he was successful in determining what the instructor deemed important in the material being studied, or it may prove that the individual has become proficient in deceiving himself and the teacher by finding a way to cheat more successfully, or it could mean that he memorizes information easily. It is also possible that the questions on the test communicated to the learner as the teacher had intended; therefore, the student is able to provide the acceptable responses. Instructional experiences for desirable learning in both the cognitive and affective domain must be as well planned as possible and guided through the use of modern methods and techniques, although fully adequate ways of assessing outcomes of either a cognitive or affective nature are not known.

It would appear a similar problem exists in curriculum design. The learning experiences are frequently structured disregarding the totality of the human being and disregarding the fact that all three kinds of learning are occurring whether planned for or not. The learning experiences in the college curriculum are often structured for only the accumulation of facts or skills with little regard given by the instructor as to what has truly been learned. Many times learning is designed completely ignoring the fact that the student may have only memorized information rather than understood it, that the student may not be able

to relate or apply the information to any other learning, and that the student may have acquired some very undesirable feelings and attitudes in the process of learning. If the student in college is to achieve the goals of general education through the learning process, the curriculum must be adequately designed in view of the goals, the learning experiences must be thoroughly planned in order that the student can successfully achieve them, and there must be planned evaluation to determine if the goals are being met by the students.

Motor Learning

The psychomotor domain refers to the development of motor skills, activities involving movements of the body. Although the word "motor" indicates the dominant nature of the activity, all forms of learning interact to produce the end results.¹² Oxendine stated that "a general dichotomy between verbal and motor learning is unreasonable since many tasks involve both processes"¹³; although the level and amount of mental activity will vary with different motor skills. Gladstone stated:

Skilled psychomotor behavior may involve small muscles in such activities as writing, large muscles in such activities as kicking a football, or both. Unfortunately for the clarity and simplicity with which it is possible to deal with situation, cognitive and perceptual learning are also involved and the decision to discuss a given behavior under the heading of motor learning is often arbitrary. In many, perhaps most cases, the precise elements which are learned when a psychomotor skill improves are not known.¹⁴

¹²Robert H. Singer et al., Physical Education: An Interdisciplinary Approach (New York, 1972), p. 119.

¹³Joseph B. Oxendine, Psychology of Motor Learning (New York, 1968), p. 12.

¹⁴Roy Gladstone, A Set of Principles of Teaching Derived From Experimental Psychology (3rd ed.; Stillwater, Okla., 1968), p. 42.

Learning a motor skill is a matter of intellectual awareness and not exclusively a matter of kinesthetic imagery, or what may be called bodily orientation. Lee emphasized that the learning process unified the three stages of learning a motor skill: 1) intellectual awareness, 2) neuromuscular skill development, and 3) practice which brings permanency to the action pattern. He further stressed the cognitive, "intellectual", aspect of motor learning by stating that "without understanding the skill will be a series of meaningless motions to the student".¹⁵

Learning many motor skills has value in the daily lives of human beings, such as walking or guiding a spoon to the mouth. Various kinds of work demand the performance of certain motor skills, such as writing, climbing ladders, or playing a musical instrument. Motor skills also may be used for enjoyment, such as swimming, playing golf, or painting. However, it is important to remember that in the process of acquiring motor skills, there is great potential for utilizing cognitive and affective learning.

Theories of Learning

For many years, much active debating has gone on between protagonists representing different ways of conceiving learning as a basic process (any phenomena which shows a continuous change in time).¹⁶ Learning theories have evolved into interpretations of learning through

¹⁵James M. Lee, Principles and Methods of Secondary Education (New York, 1963), p. 139.

¹⁶Melvin H. Marx (ed.), Learning: Processes (New York, 1969), pp. 3-5.

summarizing and synthesizing relationships among a large amount of empirical information, concepts, and generalizations. Oxendine said, "Learning Theories are attempts to explain what learning is and how it takes place."¹⁷ Philosophical differences bias people toward different interpretations as Allport pointed out, "Theories of learning (like much else in psychology) rest on the investigator's conception of the nature of man."¹⁸

Theories of learning can be classified in a number of ways; however, the interpretations outlined by the school of behaviorists (association, connectionist, or stimulus-response theories) and the interpretations presented by the school of Gestalt psychology (cognitive theories) contrast significantly.¹⁹ The differences in interpretations among the various theoretical schools of psychology have been the source of much controversy over the years; however, these differences are not as distinguishable in modern psychology. According to Hill, the "system builders" have acquired "more respect for the complexities of learning, more humility about their own systems, and more respect for the efforts of others."²⁰ She indicated further, that the system builders look on the formulations "as more or less adequate ways of summarizing present knowledge and of facilitating the gathering of new knowledge."²¹ According to Hill, "Theorists now differ not so much in their biases

¹⁷Oxendine, p. 22.

¹⁸Gordon W. Allport, Pattern and Growth in Personality (New York, 1961), p. 84.

¹⁹Wilson et al., pp. 105-121.

²⁰Hill, p. 223.

²¹Ibid.

about the nature of learning as in the areas they prefer to study and the methods they prefer to use."²²

Behavioristic Theories

Behavioral Theorists are primarily concerned with behavior as central to any understanding of the learning process. They have concentrated on studying observable acts and have generally viewed learning as behavior modified in response to specific stimuli. Oxendine said that the "Stimulus-response proponents believe that behavior can be controlled by application of the pleasure-pain principle."²³ The entire process in this view is essentially a matter of mechanical association between perceptions and responses. Modern behavioral psychologists, namely Skinner,²⁴ concur that since one can see both the stimulus and response, he should ultimately be able to control behavior by manipulation of the forces which cause behavioral response.

Edward L. Thorndike (1874-1949) was a precursor of the behavioristic movement, although as Hill has said, "in the broader sense of the term, Thorndike was certainly himself a behaviorist."²⁵ He was a reinforcement theorist who postulated three fundamental laws of learning which still have a great influence on learning theories and teaching methods. His laws were based on the stimulus-response mechanism as a process of the receptors or sense organs being stimulated, initiating a

²²Hill, p. 223.

²³Oxendine, p. 25.

²⁴Hill, pp. 68-82.

²⁵Ibid., p. 59.

nerve impulse and sending it to other nerves and muscles, and a reaction occurring. Thorndike's law of exercise holds that repeating a certain act strengthens the bond between stimulus and response, hence makes the response persist. Conversely, disuse weakens the bond. The law of effect holds that when an act results in satisfaction or reward, the act is "stamped in"; when followed by no reward or by punishment, it tends not to be repeated. Thorndike later modified this law by deciding that reward strengthens connections, but punishment does not directly weaken them. The law of readiness states that when a bond is ready to act, the action will bring satisfaction; nonaction will cause annoyance. If a bond is not ready to act and made to act, annoyance will result.²⁶

Early twentieth century behavioristic theorists, Watson and Guthrie, assumed learning "to depend only on the contiguity of stimulus and response, in other words, on the fact that they occur together."²⁷ In contrast to their position, the "reinforcement theorists" consider the reinforcing effect of reward in their theories as essential to learning. These psychologists were not concerned with the internal activity which occurred between the stimulus and response. They were primarily involved with examining and investigating methods of conditioning, controlling, and predicting behavior.

Gestalt Theories (Cognitive Theories)

Although the emphasis of the gestalt psychologists was on unified wholes, it does not mean that they never recognized separateness.

²⁶Sargent and Stafford, pp. 100-102.

²⁷Hill, p. 55.

Hill stated:

A gestalt may be referred to as a segregated whole. Of particular interest was the way that the gestalt came to stand out as distinct entities separate from the background against which they appear. This interest was expressed in the concepts of figure and ground. The figure in any perception is the gestalt, the entity that stands out, the 'thing' we perceive. The ground is the largely undifferentiated background against which the figure appears.²⁸

This relationship provides the basis for an important understanding of gestalt psychology: "the whole is more than the sum of its parts."²⁹

Learning, as viewed by a Gestaltist, is basically the progressive discovery and relating of elements in any perceived or visualized whole of experience resulting in "insight". The mere repetition of any situation is not the operative factor, but the past meaningful related experience with the repetition is of paramount importance. To the Gestaltist, perception and learning occur in the discovery of the relations already existent among the elements of a perceived whole of experience and directing activities toward some end or goal.³⁰ Oxendine provides the following interpretation of the cognitive theories of learning:

Cognitive theories of learning are based on the assumption that the learner organizes his stimulus or perceptions into a pattern or whole, as opposed to the stimulus-response concept which assumes the reception of particular stimuli, both singly and in groups. According to the cognitive theorists, stimuli from the environment are not discrete and independent from each other. All things derive their character from their relationship to other things. Stimuli are observed against a background. . . . the cognitive theories include ideas which stress the learner's awareness of the total field or combination of stimuli. Psychological reality is what the

²⁸Hill, p. 95.

²⁹Ibid., p. 96.

³⁰Ibid., pp. 94-116.

individual makes of the stimuli that come to him. The individual, therefore, (1) relates stimuli to each other, (2) hypothesizes means-to-ends relationships, and (3) behaves in a goal-directed manner.³¹

The study of insight has been the most important contribution of gestalt theory to modern understanding of learning. If learning occurs suddenly and the learner knows that now he really understands, such learning is usually remembered and easier to transfer to new situations. In such cases of learning involving insight, the gestalt language of perceptual reorganization is especially applicable. Hill explained by stating that "the learner who has insight sees the whole situation in a new way, a way which includes understandings of logical relationships or perception of the connections between means and ends."³²

The cognitive psychologists conceive the learning process as the resolution of tensions set up in the learner because of the presentation of a problem. Reconstruction, rather than repetition, is the control feature of learning. The learner's response is not to the stimulus, but to his own inner perception and restructuring of that stimulus in terms of the total situation. Instead of trial-and-error, the Gestalt psychologist would substitute observation, perception of the situation as a whole, or perception of those parts of the situation that provide a route to the goal. The result is "insight" which promotes good retention and transfer.

Although few will doubt the existence of transfer of learning, there remains a great deal unknown as to how much and under what conditions transfer will actually occur. Travers explained that the extent

³¹Ibid., p. 35.

³²Hill, p. 97.

of transfer depended upon such variables as the intelligence of the learner, his physical condition at the time of learning, his attitude toward the material to be learned, his emotional state at the time, and many other personal variables.³³ However, if the teacher deliberately teaches for transfer by concentrating upon principles to be learned and application of these principles into appropriate patterns of relationships, it is possible to maximally facilitate learning.³⁴

Principles of Learning Derived From Learning Theories

Educators and psychologists have been plagued for years to discover the process by which the human being learns. Most investigations of learning by the psychologists have been with animals but it is quite hazardous to apply the findings of animal research to human learning since the great gap that separates man from animal is acknowledged. A researcher must adhere rigidly to scientific data and be reluctant to insert personal interpretations into findings before they are applied to human learning.

There are many unanswered questions about human learning; however, from everything that is now known, human learning appears to operate in

³³ John F. Travers, Learning: Analysis and Application (New York, 1965), p. 136.

³⁴ Ibid., pp. 136-155. For additional understanding of the factors involved in the transfer of learning see Laurence Siegel (ed.), Some Contemporary Viewpoints (San Francisco, 1967), pp. 235-236; Ernest R. Hilgard and Gordon H. Bower, Theories of Learning, 3rd ed. (New York, 1966), p. 258.

essentially the same manner for all types of learning, and for all ages.³⁵

Hilgard and Bower have provided the following summary of points of view for the stimulus-response theories and the cognitive theories. They refer to them as "principles potentially useful in practice" rather than as "laws of learning".

Principles Emphasized Within S-R Theory

1. The learner should be active, rather than a passive listener or viewer. The S-R theory emphasizes the significance of the learner's responses, and "learning by doing" is still an acceptable slogan.
2. Frequency of repetition is still important in acquiring skill, and in bringing enough overlearning to guarantee retention. One does not learn to type, or to play the piano, or to speak a foreign language, without some repetitive practice.
3. Reinforcement is important; that is, repetition should be under arrangements in which desirable or correct responses are rewarded. While there are some lingering questions over details, it is generally found that positive reinforcements (rewards, successes) are to be preferred to negative reinforcements (punishments, failures).
4. Generalization and discrimination suggest the importance of practice in varied contexts, so that learning will become (or remain) appropriate to a wider (or more restricted) range of stimuli.
5. Novelty in behavior can be enhanced through imitation of models, through cueing, through "shaping", and is not inconsistent with a liberalized S-R approach to learning.
6. Drive conditions are important in learning, but all personal-social motives do not conform to the drive-reduction principles based on food-deprivation experiments. Issues concerning drives exist within S-R theory; at a practical level it may be taken for granted that motivational conditions are important.

³⁵May V. Seagoe, A Teacher's Guide to the Learning Process, 2nd ed., (Dubuque, Iowa, 1961), pp. 248-251.

7. Conflicts and frustrations arise inevitably in the process of learning difficult discriminations and in social situations in which irrelevant motives may be aroused. Hence these have to be recognized and their resolution or accommodation provided for.

Principles Emphasized Within Cognitive Theory

1. The perceptual features according to which the problem is displayed to the learner are important conditions of learning (figure-ground relations, directional signs, "what-leads-to-what," organic interrelatedness). Hence a learning problem should be so structured and presented that the essential features are open to the inspection of the learner.
2. The organization of knowledge should be an essential concern of the teacher or educational planner. Thus the direction from simple to complex is not from arbitrary, meaningless parts to meaningful wholes, but instead from simplified wholes to more complex wholes. The part-whole problem is therefore an organizational problem, and cannot be dealt with apart from a theory of how complexity is patterned.
3. Learning with understanding is more permanent and more transferable than rote learning or learning by formula. Expressed in this form the statement belongs in cognitive theory, but S-R theories make a related emphasis upon the importance of meaningfulness in learning and retention.
4. Cognitive feedback confirms correct knowledge and corrects faulty learning. The notion is that the learner tries something provisionally and then accepts or rejects what he does on the basis of its consequences. This is of course the cognitive equivalent of reinforcement in S-R theory but cognitive theory tends to place more emphasis upon a kind of hypothesis-testing through feedback.
5. Goal-setting by the learner is important as motivation for learning and his successes and failures are determiners of how he sets future goals.
6. Divergent thinking, which leads to inventive solutions of problems or to the creation of novel and valued products, is to be nurtured along with convergent thinking, which leads to logically correct answers. Such divergent thinking requires the subject to perceive himself as potentially creative through appropriate support (feedback) for his tentative efforts at originality.³⁶

³⁶ Hilgard and Bower, pp. 562-564.

Although basic research must continue to question assumptions and attempt to increase and improve knowledge and understanding about learning, applied research must utilize what is known at present and apply it as well as possible. As Hilgard and Bower suggested, many of the principles developed from the behavioristic theories and the cognitive theories are applicable in learning situations as long as attention is given to the nature of the learner and careful analysis is made of the tasks to be performed.³⁷

It appears that the cognitive theories make more allowance for the power and flexibility of man's intellectual processes and the ways in which he deals with complex problems. Learning is problem solving--it is not the acquisition of a body of information or the mastery of skills; it is the process of acquiring the ability to think, and developing the rationale and the insights necessary for making significant decisions.

However, the author as an educator, does not feel that it is a "one or the other" matter because the important thing is to find the most successful way to assist students to become independent learners. Therefore, the teacher must know, understand, apply, and evaluate the principles of learning.

Learner of the 1970's

The contemporary college student is the individual of concern for this investigation. The goals of the general education program of the undergraduate college curriculum and the contributions of physical

³⁷Ibid.; pp. 565-573.

education toward attaining these goals have no validity unless the "student" is the center of concern. The current college students' needs, characteristics, and interests must be viewed, and should be reviewed continuously, before determining potential contributions of any discipline to the general education of the student.

Today's student comes from and lives in a mobile population, and his purpose for pursuing an advanced education stems from a variety of reasons. He may wish to prepare himself for a vocation, he may be killing time or avoiding the draft, he may be in college because it is "the thing to do", or he may be attending to attain social status, and finally, there seem to be many who look to the college situation to help them achieve self-identity.³⁸ Some girls come to college looking for a mate since they see their future role as one of being a wife and mother; others are seriously interested in training for a career as women become more "liberated". Whatever the reasons, these students are demanding quality teaching and a curriculum relevant "to their future ambitions but also to their current concerns."³⁹

In 1968 the Hazen Foundation Report on The Student in Higher Education made the following generalizations on the contemporary college student:

1. Students are seeking enduring commitments but are skeptical about the ideologies and orthodoxies that clamor for their loyalty.
2. Because of their suspicion about formal ideology, the new students turn to human relationships as the source of most of

³⁸ Lewis B. Mayhew, Contemporary College Students and the Curriculum, SREB Research Mono. No. 14 (Georgia, 1969), pp. 2-3.

³⁹ Paul Dressel, College and University Curriculum (Berkeley, Calif., 1968), p. 6.

the purpose and meaning they seek in their lives.

3. The contemporary college student feels strongly the need to belong but is profoundly skeptical about most of the organizations he encounters, particularly an organization that claims to offer him an education.

4. The new student is generous and idealistic in his own fashion but is frequently fearful that any long-term commitment to social service may destroy his idealism and thwart his freedom.

5. The now students, for all their apparent poise and sophistication, are frequently hesitant and uncertain.

6. Because of his doubts about himself, about organizations, and the possibility of faith and commitments, the new college student has a tendency to be suspicious and distrustful of the administration, and to a lesser extent, the faculty of his college.

7. Students come to college with a great deal of excitement and willingness to do the work demanded of them, but their expectations and performance usually decline very rapidly during first months of the freshman year.

8. Most students apparently expect that the college years will mark the definitive end of the dependence on their parents.⁴⁰

Many of the students are disenchanted products of the "American dream" and desire to gain independence from their parents; they feel insecure and hope to develop poise and self-confidence. Most of the students place a high value on personal peer-group relationships and consider these associations as having a profound effect on their development of self-reliance and responsibility, self-awareness, and a personal philosophy of life.⁴¹ Barry Pelton said:

Today's student wants to control his own destiny; instead it is controlled by the mandate of government and by his elders whose judgment he questions. He appears self-centered and selfish,

⁴⁰Mayhew, p. 34.

⁴¹Ibid., pp. 3-4.

yet he strongly espouses a visionary society. He wants to live without racial, economic, or ethnic discrimination. He respects honesty, sincerity, loyalty, and integrity but perceives lack of these in the actions of adults.⁴²

College students of 1970 have grown up in an ever-increasing chaotic world, military conflicts, social and civil contentions, and international problems. Scientific and technological advances have surpassed the judgment and insight for meaningful use or control of them. The students feel that the survival of American democracy and preservation of peace rests on their shoulders.

The adult world of these students will be one of dynamic and constant change demanding knowledge, insights and abilities of many kinds in order for them to cope with a wide variety of academic, professional, cultural, technical, and social problems. Mayhew suggested the following skills as both desired and needed by students to successfully function in contemporary society:

1. To read, write, speak, and listen with some sophistication in subjects of concern to people living in the last half of the 20th century.
2. To recognize personal problems and issues and to be able to resolve them with the best possible information and assistance.
3. To know and be able to use a library and other bibliographic aids--not only printed matter, but other media.
4. To cooperate intimately with others in solving complex problems.
5. To distinguish between cognition and affection and to be able to use both rationality and feeling for satisfaction of the total person.
6. To be able to relate in both evaluative, and nonevaluative ways to other people, and to understand the appropriateness of each.

⁴²Barry C. Pelton, New Curriculum Perspectives (Dubuque, Iowa, 1970), p. 38.

7. To be able to enjoy one's own activities without threat or guilt if those activities are unusual and not commonly valued by others.

8. To be able to identify gaps in one's own experience or learning, and to find ways to fill them.

9. To understand computers and other ways of arriving at quantitative knowledge, and to recognize both the capabilities and limitations of quantification.

10. To know and be able to express one's own values and to defend them and modify them when occasion requires.⁴³

This researcher believes that if the student is to find his distinct and purposeful role in the 1970's and 1980's he needs to experience learning which is usable or transferrable to different situations. This means that both "what" and "how" a person learns is vitally important. The present common practices of dispersing disintegrated knowledge without establishing goals, pouring vast amount of precise and factual information into the students as if they were empty vessels, evaluating their "learning" on the basis of their ability to regurgitate memorized facts (if they were fortunate enough to memorize the ones the teacher asked for on the test), will only continue the sterility of the undergraduate general education curriculum as evidenced in many institutions today. Learning experiences which encourage the student to adapt, to generalize as well as to specialize, and to apply are essential to create an atmosphere for effective learning of broad concepts and principles. The present as well as the future needs and interest of the student must provide the basis for determining purposeful goals and the learning experiences needed for achievement of these goals.

⁴³Mayhew, pp. 84-85.

CHAPTER IV

THE CONTRIBUTIONS OF PHYSICAL EDUCATION TOWARD ATTAINING THE BEHAVIORAL GOALS OF GENERAL EDUCATION

The Purpose of Higher Education

Higher education has been a controversial subject since its inception and is currently undergoing serious criticism both from without and within the colleges and universities. Arnold Toynbee said, "there seems to be a world wide consensus that the traditional system of higher education does not meet, any longer, the educational needs of a more and more rapidly changing society."¹

During the past 100 years, the American College has passed through many significant changes, and even within the brief span of the past fifty years, modifications have been extremely rapid. The classical education of yesterday has been replaced by a more modern group of courses with little historical perspective. The former prime objective of the college was training through mental discipline; however, in 1957 the Educational Policies Commission of the National Education Association declared the following as the purposes of higher education:

. . . to provide opportunity for individual development of able people, to transmit the cultural heritage, to add to

¹Alvin C. Eurich (ed.), Campus 1980 ("A Delta Book"; New York, 1968), p. xix.

existing knowledge through research and creative activity, to help translate learning into equipment for living and for social advance, and to serve the public interest directly.²

The traditional, conservative educators, who hold with the classical-realist view, such as Robert Hutchins, take issue with the above stated goals of higher education. They have in the past and still defend "cultivating intellectual qualities" and "conserving the past" as primary aims of institutions of higher learning. In contrast, the "progressive" educators view "the promotion of the total development of individuals" as the major goal of universities.

A review of the literature has convinced this writer that the report of the Committee on the Student in Higher Education, sponsored by the Hazen Foundation and chaired by Joseph Kaufman, has provided the most significant statements in regard to the present purpose of the college and university. This committee concluded that:

. . . the chief goal of the college and university is to train and develop the human intellect, extending the power of independent and balanced thought and deepening the powers of discrimination and critical expression. But it is no longer possible to take a narrow view of intelligence as 'academic knowledge', isolating cognitive growth from moral and general maturation of the person. The view appears untenable not so much for reasons of philosophy, but rather because our knowledge of the nature of the human personality forces us to conclude that cognitive growth which is separated from the development of other aspects of the human personality is illusory or distorted.³

²The Educational Policies Commission, Higher Education in a Decade of Decision (Washington, D. C., 1957), pp. 6-10.

³The Student in Higher Education, Report of the Committee on the Student in Higher Education (New Haven, Conn., 1968).

General Education

In an effort to keep education concurrent with the vast amount of new knowledge, with the rapid changes in culture, and with advances in technology, the concept of general education appeared in colleges and universities. This occurred during the early part of the twentieth century, but, to date, there is no unanimity of purpose or design. Today is the epoch of rapid change and of the knowledge explosion, and social life is considerably different from past modes of life. To this extent, the present situation is unprecedented, and this suggests that both subject matter and course requirements must deviate from the pattern predominate in the past. Above all, what is essentially a quantitative requirement is no longer valid today. It is not the number of required courses that is important, but rather their quality. Quality in subject matter, however, to say nothing of the teaching method, must be determined by the goal sought.

Various approaches have been conceived and tried for accomplishing the objectives of general education which have remained basically the same. The system of a required number of core courses, the separate-disciplines approach, the interdisciplinary courses approach, the "Great Books" approach, and the elective system are examples which have been attempted with varying degrees of success. Their apparent failure to accomplish the intended purposes has been related to a variety of causes such as: lack of qualified instructors, disinterest of faculty, inadequate resources, negligent organization and planning, pressure for specialization, pressure for preparation for graduate school, the "publish or perish" pressure on faculty members, and lack of

communication and cooperation among disciplines within the departments and between the colleges.

The struggle between "specialization" and "general education" has long been a fundamental issue in the undergraduate curriculum. Dressel pointed out that the early pressure on the student to select a vocation might destroy liberal and general education.⁴ However, professional education for a technological society must remain an important part of higher education since America is still essentially an industrial society. The students, however, seem to urgently desire more than a scientific and technological world. They indicate real personal concern for man as an individual, and desire to embrace the basic human values into their lives. Freedom from material power and affluences is an important goal for many of today's youth. Therefore, the cry for relevancy of the curriculum by the students goes beyond their dislike for any rigid curriculum and their boredom with studies which fail to relate to immediate social and political events. They appear to be searching for a meaningful life in a society which has not lost the human and personal touch, a life of personal fulfillment growing out of an integrated experience.

Man is believed to be like all other men in some ways, and like no other man in others. As this researcher views it, "General Education" is that part of the undergraduate curriculum concerning itself with likenesses rather than differences of man in relation to his needs and interests as an individual, as a family member, and as a citizen in a democratic society. The purposes of general education and professional

⁴Paul L. Dressel, College and University Curriculum (Berkeley, Calif., 1968), p. 101.

education should be interrelated with all learning experiences, whether formal or informal, and should be integrated into meaningful concepts for the development of the "whole man".

For the purpose of this study, the twelve goals of general education presented by B. Lamar Johnson in 1952 were accepted since they were representative of the intent and purpose of general education throughout the years.⁵ The multiplicity of problems encountered when trying to accomplish the goals of general education remain to be solved as Thornton stated:

Such objectives are not new in American higher education; the novelty consists in their clear and explicit recognition and in the realization that students do not achieve them accidentally as a result of exposure to random selection from the hundreds of available courses. Certainly no college will attempt to establish twelve courses, each to contribute to one of these goals. It is equally certain, however, that introductory courses in single disciplines are not the most direct means to effect the changes contemplated in the final six goals.⁶

Definition of Physical Education

The discipline of physical education has played a role in the general education program of students at most colleges and universities with varying degrees of success and acceptance in terms of student, faculty, administrative, and public approval. The programs have had many similarities as to structure, implementation and course content; however, there has also been much diversity related to different individual and departmental philosophies of physical education as well as

⁵See Chp. I, page 6, for a list of the twelve goals as stated by B. Lamar Johnson.

⁶James W. Thornton, Jr., The Community Junior College, 2nd ed. (New York, 1966), p. 199.

available human and financial resources, facilities, and equipment.

Definitions of physical education have varied from the early definition provided by Jesse Feiring Williams's of, "Physical education is the sum of man's physical activities selected as to kind, and conducted as to outcomes,"⁷ to the more current definition of physical education as defined by Ulrich and Nixon:

Physical education currently is defined as the art and science of voluntary, purposeful human movement. Its central concern is man engaging in selected motor performances and the meaning and significance of these experiences. Thus, physical education is a broad cross-disciplinary subject.⁸

Most definitions of physical education have indicated that it is a part of education concerned with physical, mental, and social aspects of an individual through the media of gross motor activity. Webster's Seventh New Collegiate Dictionary definition of physical education, "instruction in the development and care of the body usually involving training in hygiene and systematic exercises," is a most inadequate explanation of the discipline construed by taking a meaning of the "physical" and attaching it to a meaning for the word "education". Webster defined education as "the knowledge and development resulting from an educational process," and the definition given for "process" is, "a series of actions or operations conducing to an end." Webster has substituted the word "instruction" for "education" which is erroneous in the modern concept of the teaching-learning process. The word "instruction" implies simply action by the teacher, no student involvement.

⁷Jesse F. Williams, The Principles of Physical Education, 8th ed. (Philadelphia, Pa., 1964), p. 13.

⁸Celeste Ulrich, The Social Matrix of Physical Education (New York, 1968), p. vii; John E. Nixon, "Preface," Celeste Ulrich, p. vii.

The medium of purposeful movement is the process, the means and not the end, in physical education. Perhaps a more appropriate and knowledgeable definition of physical education is "the knowledge and development resulting from movement experiences."⁹ For purposes of clarifying the meaning of physical education, the report of the National Conference on Interpretation of Physical Education stated that:

Physical education is --

Concerned with human movement as physical activity, as communication and expression, in teaching-learning medium, for human welfare.

An organized, sequential and systematic use of movement experiences for education purposes.

An integral part of school curricula.

Physical education has --

An identifiable body of knowledge from sciences, humanities, researches, accumulated professional experiences, reflective thinking--which interprets the nature of human movement and its effect on the individual in his cultural setting.¹⁰

According to Oberteuffer and Ulrich, the modern program of physical education considers man as an entity and recognizes its responsibility for his total development. Man is complex but he is not divisible into body, mind, and spirit. Therefore, the physical education experience "does not confine its interest to man's organic development nor does it emphasize social or intellectual values to the exclusion of all else."¹¹

We have not to train up a soul, nor yet a body, but a man;
and we cannot divide him.

-Montaigne, Essays I, xxv

⁹Report of the National Conference on Interpretation of Physical Education (Chicago, Ill., 1962), pp. 9-10.

¹⁰Ibid.

¹¹Delbert Oberteuffer and Celeste Ulrich, Physical Education, 3rd ed. (New York, 1962), p. xii.

Contributions of Physical Education

During each period of time the United States has been engaged in war, there has been an upsurge of interest in the physical fitness of the American people;¹² in fact, Oberteuffer pointed out that "every time some nation has been in a jam, either real or imaginary, it has sought to improve the fitness of youth as an important part of the solution to problems."¹³

The people of the United States have always seemed to be appalled by the large numbers of men who were unable to pass minimum standards of health to serve in the armed forces. The follow-up, in most cases, has consisted of a great deal of talk; and some hasty, ill-conceived physical training programs being put into action. Even legislators were sufficiently shocked by the results of the physical examinations from World War I that the following ten years brought laws requiring physical education to be taught in schools in 27 states.

Former President Dwight D. Eisenhower was a gentleman who by his way of life exhibited that he understood the personal value of maintaining a high level of fitness. He spoke frequently of the need for individuals in a democratic society to become totally fit. At his first Conference on Youth Fitness in 1956, Mr. Eisenhower said:

¹²Lawrence A. Golding and Ronald R. Bos, Scientific Foundations of Physical Fitness Programs, 2nd ed. (Minneapolis, Minn., 1970), pp. 1-2. Elements which make up physical fitness are cardiovascular endurance, strength, agility, flexibility, speed, power, balance and coordination. By objective laboratory methods an individual may be tested to obtain a physiological fitness profile; then, if the individual is above average on all of the above items he is considered physically fit.

¹³Delbert Oberteuffer, "The Role of Physical Education in Health and Fitness," Michigan's Health (March, 1962), p. 19.

National Policies will be no more than words if our people are not healthy in body, as well as of mind, putting dynamism and leadership into carrying out of these major decisions. Our young people must be physically as well as mentally and spiritually prepared for American Citizenship.¹⁴

In 1960, the widely-publicized speech, "The Soft American," presented by the President-elect of the United States, John F. Kennedy, alerted the Nation again to the fact that "the physical vigor of our citizens is one of America's most precious resources." He stated further:

For physical fitness is not only one of the most important keys to a healthy body; it is the basis of dynamic and creative intellectual activity. The relationship between the soundness of the body and the activities of the mind is subtle and complex. Much is not yet understood. But we do know what the Greeks knew: that intelligence and skill can only function at the peak of their capacity when the body is healthy and strong; that hardy spirits and tough minds usually inhabit sound bodies.¹⁵

Both of these presidents have emphasized the necessity of maintaining a nation of healthy citizens for preservation of the democratic way of life; however, it should also be remembered that a free society assumes the obligation of providing opportunities for the total development of individuals.

In February of 1961, following Kennedy's speech, the United States Department of Health, Education, and Welfare held a Conference on Physical Education of Youth. At the first general session, Abraham Ribicoff, Secretary of Health, Education, and Welfare, made the following statement:

¹⁴ Dwight D. Eisenhower, Speech before Youth Fitness Conference, Washington, D. C., June 16, 1956.

¹⁵ John F. Kennedy, "The Soft American," Sports Illustrated (December 26, 1960).

In the critical and exacting years ahead our Nation will need citizens who are resourceful, vigorous, strong, vital, energetic, active . . . in short, physically fit. We shall need people who can work hard and think fast, people who have the great inner sources of physical strength, coordination and precision.¹⁶

The views expressed by these men seem as appropriate now, and for the future, as they were at that time. It has been said that history repeats itself; therefore, if Americans recall the downfall of the Greek and Roman civilization from inner erosion of their total value system, they will take action to avoid deterioration of this democratic society. Former President Kennedy warned the Nation in 1961 with the words, "The softening process of our civilization continues to carry on its persistent erosion."¹⁷ In 1959, Dr. Paul Dudley White made the following significant statements:

In a single generation we have let the comforts of prosperity take over our lives and rule out health. This has made us careless, prone to illness and to living lives of apprehension. In our home and communities we live a push-button existence, ride about in automobiles, eat, drink, smoke and worry excessively and, at the slightest discomfort, we reach for an aspirin or a tranquilizer. We talk too much about the psyche (mind or soul) and think nothing about the soma (body).

From the rugged individualists that once made up our nations we Americans have deteriorated into softies, idlers, and escapists. Isn't it time that we take a personal health inventory?

Being healthy involves much more than avoiding disease. You may not be sick, but you may not be healthy either. Many today are borderline cases. When I think of health, I think of living positively, of working, exercising, watching our diets, cultivating equanimity, and respecting our bodies as well as our minds.

¹⁶Conference on Physical Education of Youth, Washington, D. C., February, 1961.

¹⁷John F. Kennedy, A Presidential Message to the Schools on the Physical Fitness of Youth, Press Conference, July 20, 1961.

I would emphasize soundness of body, mind and spirit--all three--but no one of the three should hold the limelight. The psyche and the soma are the arcs of the same circle. Too long have we allowed ourselves to be dominated by psychosomatic or 'mind over spirit' physiology. There is no doubt that good health affects the spirit as much as spirit affects health. As a beginning move toward health, it would be appropriate to put these two parts of man together again. I prescribe regular convalescence from serious illness.¹⁸

It is not the intent to suggest that physical activity is the cure-all for the variety of problems individuals are facing in modern living, nor the sole answer to revitalizing the Nation, nor even the answer to all health problems. However, the author does intend to emphasize the value, indeed the necessity, of the inclusion of physical activity in one's life to maintain a state of total well-being. As Dr. White so appropriately said, it is time that man's wholeness be recognized and be dealt with realistically. Man moves, thinks, acts, and feels with his body. This is a dynamic and evolving homeostatic process of the whole organism which is continuously adapting to the interactions of his society and with his environment.

In order to maintain a state of well-being for living a full and efficient life, man should attain and maintain an optimal level of fitness which cannot occur without vigorous activity. In 1960, Dr. White directed attention to a dangerous practice in education by stating:

It is a great waste for man or woman to be highly trained in a profession, business, art, science, or government, and at the same time to neglect positive health measures leading to a useful and happy longevity. There is danger at the present time in the enthusiasm for the cramming of the brains of our young people with facts, scientific or otherwise, that there will be inadequate time for the establishment and perpetuation of physical fitness; which should never stop.¹⁹

¹⁸Paul Dudley White, The American Weekly (January 4, 1959), p. 4.

¹⁹The Sacramento Bee, "Ike's Heart Doctor Asks Stress on Physical Fitness," (Associated Press), May 26, 1960.

H. Harrison Clarke said, "The physically fit person should be able to carry out the activities of the day, whatever they may be, and should still have ample energy to enjoy his leisure and to meet life's unforeseen emergencies."²⁰ Within this definition there is certainly reason for desiring or placing value on physical fitness. In reference to the value of fitness, Toby Freeman, a medical doctor, claimed the only and best reason for being physically fit is for one's own personal benefit of living a happier and healthier life. He believes that the "test of education is performance,"²¹ and that if Americans were truly given a physical education many of the present chronic health problems would disappear.

The writer is not suggesting that the inclusion of physical education in the general education program would result in all students becoming physically fit or healthy individuals. However, the students would have an opportunity to attain the knowledge, understanding, and appreciation of the human organism and the process for its development and maintenance. The qualities comprising the biological aspects of fitness cannot be acquired previous to the college years and stored up for future use; therefore, the physical education experience can provide the student an opportunity to further develop the components of physical fitness. From the experience the student should develop a positive attitude toward the value of muscular exercise in his life. This is not always the result when scheduling requires that individuals are massed

²⁰H. Harrison Clarke, "Physical Fitness Benefits: A Summary of Research," Education, LXXVIII (April, 1958), p. 460.

²¹Toby Freeman, "Fitness for the Space Age," Quest, III (December, 1964), pp. 31-35.

together and required to participate in calisthenics or other vigorous activities for hurried fifteen or thirty minutes of actual participation. In some cases, it appears to have had a negative effect on individuals, since many of them discontinue exercising, and even exhibit a real aversion to muscular exercise following programs of this nature.

Man's actions are guided by his needs, values, beliefs, and how he perceives the situation in relation to these needs, values, and beliefs. Learning experiences should set in action positive driving forces for satisfying needs and desires. The learner needs to become intrinsically motivated. It must be recognized that as an individual is participating in any form of muscular activity, whether it is calisthenics or sport or dance, the whole person is involved and interacting within its present environment. If the experience has a "why" and provides pleasant feelings, success, and rewards, it is conducive to changing previously unfavorable attitudes into favorable ones as well as develop new desirable attitudes. Klausmeier and Goodwin reviewed the research on attitude change during the college years and conclude that, "changes in attitudes do occur during college years."²² According to these educational psychologists, efficient learning of attitudes, including all outcomes in the affective domain, are facilitated through:

- 1) providing exemplary models
- 2) providing pleasant emotional experiences
- 3) extending informative experiences
- 4) using group techniques
- 5) arranging for appropriate practice, and
- 6) encouraging independent attitude cultivation.²³

²²Herbert J. Klausmeier and William Goodwin, Learning and Human Abilities, 2nd ed. (New York, 1966).

²³Ibid., p. 375.

Although there is still a great deal not known about attitude learning and modification, college educators cannot turn their faces to the wall and ignore the fact that attitudes and values established during the college experience will have a significant influence upon the student's future life. Attitudes are of utmost importance to educators as they provide meaning in an individual's life as well as influence his achievement of goals. Due to conflicting needs, conflicting group affiliations, and diverse teachings of authorities in different areas, the individual may select attitudes which are inconsistent and contradictory to his personality.²⁴ Furthermore, as each student is affected, so is his peer group, his family, his community, his state, his United States, and the whole world.

There are two contrasting points visible in viewing the health of the modern age adult. On the one hand there is a tremendous loss to society of young manhood during his most productive years by the increase in mortality rate due to cardiovascular and other diseases; and yet, the normal age span is increasing with the advent of modern medicine and the control of communicable diseases. Just walking through a few of the modern day nursing homes is sufficient to convince a person of the significant difference between simply being alive and "living". There appears to be real value in putting "life into our years" rather than "years into our life".

According to Kraus and Raab, the striated musculature system is in a state of neglect and causing hypo-kinetic diseases (their term for diseases produced by lack of exercise). They contended that:

²⁴David Krech, Richard S. Crutchfield, and Egerton L. Ballachey, Individual in Society, chp. vi (New York, 1962), and chp. vii.

. . . the action of the striated muscles influence directly and indirectly circulation, metabolism, and the endocrine balance. It directly affects the structure of our bones, our posture, and the positions of our bodies. Last but not least the striated muscle serves as an outlet for our emotional stresses.²⁵

From their research studies to establish the protective value of exercise, they found that under-exercise brings on both physical and emotional stress which is directly related to internal diseases, such as cardiovascular diseases, to musculoskeletal problems, such as low back pain and tension syndrome, and to psychiatric problems.²⁶ Corbin et al. pointed out that stress has been identified as a factor in the development of many diseases such as ulcer, rheumatism, heart disease, diabetes, high blood pressure, asthma, headache, and digestive disturbances.²⁷ At present, stress research indicates that a physically fit individual is more capable of adapting to stressful situations than a non-fit person.²⁸

Scientific methods and measuring techniques have provided physical education with ways of determining objective evidence of the value of muscular activity. With the information available at present, few would question the fact that vigorous activity will assist in developing and maintaining efficient functioning of the circulatory, respiratory, and muscular systems. Likewise, there is general agreement that muscular

²⁵Hans Kraus and Wilhelm Raab, Hypo-Kinetic Disease (Springfield, Mass., 1961), p. 5.

²⁶Ibid.

²⁷Charles B. Corbin et al., Concepts in Physical Education (Iowa, 1970), p. 105.

²⁸Ibid.

activity contributes to neuromuscular skill development, to weight control, and to the development of such aspects of fitness as strength, agility, flexibility, and endurance.²⁹

With all the evidence available on the value of activity in developing and maintaining the qualities comprising the biological aspects of fitness, and with the repeated emphasis placed upon physical fitness by the leaders of this nation, there still clings a stigma in some segments of academia in regard to anything that has to do with physical activity, unless the interest is in the form of impersonal, objective investigation. The study of factual knowledge of how the body parts function and use of limited parts of the body such as the eyes, the ears, the fingers, and the brain are acceptable in most academic circles, but if the whole body is involved in real, honest perspiration from actual energy-output, then certain individuals in the educational community label it as a "non-academic pursuit". Strangely enough, even though the body in the Bible is referred to as God's Holy Temple, some individuals have placed the body in low esteem and glorified the mind as if they were two separate entities. In a paper entitled "Body or Brain: Problems of Survival," Bruno Balke (a physiologist) spoke of man's avoidance of physical effort, and "especially when such involvement receives a very inferior rating in a world of intellectual or

²⁹For detailed information on known effects and benefits of exercise, see the following: Arthur H. Steinhaus, Toward an Understanding of Health and Physical Education, "Chronic Effects of Exercise," pp. 178-202, and "Exercise-A Review," pp. 203-213 (Dubuque, Iowa, 1963); H. Harrison Clarke; Hans Kraus and Wilhelm Raab; Kenneth H. Cooper, The New Aerobics (New York, 1970), pp. 16-17; and Fred V. Hein and Allan J. Ryan, "The Contributions of Physical Activity to Physical Health," Research Quarterly, XXI (May, 1960), pp. 263-285.

pseudo-intellectual society."³⁰ He stated further that "it has become fashionable to ridicule the utilization of our muscle machinery,"³¹ and then posed the question, "In a school dispute on the choice between more time allowed for courses in sciences or physical education: Who usually wins?"³²

The point in issue is whether what is being done is a means, an end in itself, or both, and whether educators truly believe in the "whole person" or simply give vocal support to the view. It appears contrary to logical reasoning to believe that whatever affects an individual affects the total person, and continue to use a dualistic approach to learning in today's educational programs. Does the student learn by just the use of his mind or is the whole student involved in the process? Why is the student learning--for learning's sake or to achieve what Erich Fromm refers to as "happiness"?

Happiness is an achievement brought about by man's inner productiveness and not a gift of the gods. Happiness and joy are not the satisfaction of a need springing from a physiological or a psychological lack; they are not the relief from tension but the accompaniment of all productive activity, in thought, feeling, and action. Joy and happiness are not different in quality; they are different only inasmuch as joy refers to a single act while happiness may be said to be a continuous or integrated experience of joy; we can speak of 'joys' (in the plural) but only of 'happiness' (in the singular).

Happiness is the indication that man has found the answer to the problem of human existence: the productive realization of his potentialities and thus, simultaneously, being one with the world and preserving the integrity of his self. In

³⁰Bruno Balke, "Body of Grain: Problems of Survival," The Academy Papers, IV (October, 1970), p. 25.

³¹Ibid.

³²Ibid.

spending his energy productively he increases his powers, he 'burns without being consumed.'³³

The human organism was designed for use, and only through continued use will it grow, develop, and continue to function providing energy and stamina necessary for optimal living. Although the environmental world is changing, forcing human beings to make many rapid adaptations, the human body is still a biological organism needing proper nutrition, adequate rest and sleep, judicious exercise, and a reasonably-free emotional state. In addition to being free from disease and infirmity, these are the essential ingredients for maintaining an optimal level of health as identified many years ago by physiologists.

As Davis, Logan, and McKinney have proposed, an individual will need to be involved in regular physical activity if he wishes to sustain health and combat the degenerative effects of modern-day inactive living.³⁴ It is no longer possible for most individuals to depend on their daily pattern of living to provide sufficient activity for bodily health, and it is doubtful that anyone would desire to revert to the "good old days" of no automobiles, power mowers, canned and frozen foods, and all of the other luxuries which technological advances have created to make life more enjoyable.

The writer knows from screening tests given to entering college freshmen there is reason for concern in regard to their physical

³³Erich Fromm, Man for Himself, 3rd printing (New York, 1966), p. 192.

³⁴Elwood Craig Davis, Gene A. Logan, and Wayne C. McKinney, Biophysical Values of Muscular Activity, 2nd ed. (Dubuque, Iowa, 1965), p. 108.

fitness,³⁵ and a recent physical attitude inventory given to classes at Oklahoma State University indicates that most of them have not established regular patterns of activity.³⁶ Physical education properly organized and structured can provide the knowledge, the "why", and the means by which an individual can attain and maintain an adequate level of physical fitness to live an effective and efficient life. The college physical education class is not the answer to the maintenance or development of physical fitness, but it can assist students to place the role of muscular activity in its proper perspective within the context of his own requirements and living pattern.

Teachers providing learning experiences in any of the disciplines must be concerned with the concomitant learning acquired by the student. The humanities professor utilizes every means at his disposal and within his "know how" to provide the student with a vast amount of knowledge regarding his cultural heritage, but it does not necessarily follow that any or all of the students will gain a perspective of his time and place in the world. The political science professor may do an excellent job of providing the student with information of the democratic form of government with its privileges and responsibilities, but this does not necessarily mean that any or all of the students will exercise these privileges and responsibilities, just as the physical education professor cannot guarantee that students will apply knowledge and understandings gained concerning their body.

³⁵Unpublished results of tests given to entering college freshmen from 1962-1968 at Phillips University, Enid, Okla., by the author.

³⁶Unpublished results of the "Student Physical Activity Inventory" given to 46 physical education activity classes at Oklahoma State University, Stillwater, Okla., in 1971-1972, by Jo Oliver.

Learning in the cognitive domain and the affective domain occur simultaneously; however, it is important that the learning is guided toward positive results. Knowledge and understanding are not necessarily the same thing, although teachers sometimes assume that they are. It is equally important to understand that learning in the affective domain cannot be left to chance. Affective objectives must be constructed by the students and the teacher (as all other objectives); and then, the content and learning experiences to achieve the desired objectives must be well planned.

The physical educator as he works with students in sports, dance, or any other kind of movement experiences should be cognizant of the fact that the whole student should be involved, not just a body, but a total being capable of thinking, reasoning, and feeling. The learning possibilities are limited unless the students are actively involved in utilizing all three kinds of learning regardless of what they are attempting to learn.

If a mechanical machine ceases to work, it is usually repaired or replaced, but there is a resultant loss of productivity and money. If a part of the human body ceases to function properly, it is often impossible to repair or replace the damaged part, and untold loss of productivity, efficiency, and money can result. Some people even give more attention to their cars, boats, and cycles than they do to their bodies.

Most people would tend to agree that they do not enjoy pain, that they do not look forward with pleasure to spending time in the hospital or long periods of time in bed, that they do not eagerly anticipate surviving via the pill bottle, that they would prefer living with their own heart rather than an artificial one, and that living an extra few

years would be wonderful if they could remain alert and active. It would appear in modern society there is more concern over building hospitals, extended-care complexes, nursing homes, and rest homes rather than providing money and exerting effort to prevent the ever-increasing need for such places.

There are other inherent potential contributions of the physical education experience to the general education of the student. The student has the opportunity to gain the knowledge and skills necessary to enjoy participation in a variety of activities which will be of value to him during his years in college and in the years ahead. The physical activity not only has the possibility of enhancing the student's physical fitness, but other outcomes are of vital importance in a day when Americans are experiencing what Alvin Toffler has referred to as "Future shock," (defined as a "dizzying disorientation brought on by the premature arrival of the future").³⁷

With unbelievable rapidity, the United States has undergone dynamic changes in the process of urbanization. People are living longer, retiring earlier, having longer vacations, and the four-day work week is becoming a reality for many. The labor market needs fewer people to function; yet, there is a constant increase in population. There is less demand on members of a family to meet their survival needs. Human relations around the world have been deeply affected by the transition to new levels of technological power. John Platt tells that:

. . . in the last century, we have increased our speeds of communication by a factor of 10^7 ; our speeds of travel by 10^2 ; our energy resources by 10^3 ; our power by weapons by

³⁷Alvin Toffler, Future Shock ("Bantam Books"; New York, 1970), p. 44.

10^6 ; our ability to control diseases by something like 10^2 ; and our rate of population growth to 10^3 times what it was a few thousand years ago.³⁸

This is an age of anxiety and tensions, "pick-me-ups" and "calm-me-downs," a highly mechanized age which is dehumanizing society. Toffler warned that:

The increased speed of broad scientific, technological, and social change makes itself felt in the life of the individual. A great deal of human behavior is motivated by attraction or antagonism toward the pace of life enforced on the individual by the society or group within which he is embedded. Failure to grasp this principle lies behind the dangerous incapacity of education and psychology to prepare people for fruitful roles in a super-industrial society.³⁹

If Toffler's warning is translated into meaning for higher education, he seems to indicate that academia may be pressing the undergraduate student into a specialization with an accumulation of a great amount of technical information, completely disregarding the nature of man with his human needs. The next century does not need non-thinking, non-feeling, mechanical robots, and "man" is not an empty storehouse which when stuffed to the brim with knowledge will be able to successfully meet the challenges of tomorrow.

Strangely enough, this "super-industrial society" which has created man and time "savers" so prolifically, has erupted with problems like a volcano. Man must cope with these problems if he is to improve his environment and preserve his democratic way of life. Man must be able to think and use facts in new ways. Stress and anxieties are causing physical illnesses which were uncommon during the years of the dreaded smallpox, scarlet fever, pneumonia, and poliomyelitis. Leisure time

³⁸ John Platt, "What We Must Do," Jones, p. 258.

³⁹ Toffler, p. 44.

has arrived for some and found them totally unprepared to enjoy it. Too many in modern society attempt to relieve tension and fill free time by drinking or drugging themselves into a state of relaxation or trouble free utopia.

There seems to be a strong relationship between man being unable to cope with anxieties and his inability to benefit from his new-found leisure time. There are still many people caught up in the Puritan work ethic with "work" as the central goal of their lives; therefore, they are completely lost when not working. They find themselves doing nothing or perhaps worse yet, they work at playing.

The fast pace of a work-day with its variety of pressures causes physiological stress; and for the many who work with modern machinery or in many offices, there is monotony and de-personalization. And whether rich or poor, importance is placed on "having" rather than "doing" or "being". The vicious circle begins with individuals hurrying to work more to acquire more material things and prestige or status. The very essence of the "good life", or "quality living", has no part in this "mod" way of existence.

Everyone needs to find appropriate ways for releasing daily built-up anxieties and tensions.⁴⁰ The answer does not seem to be the familiar American pastime of collapsing in a big easy chair with a drink in hand to watch television; perhaps, for the individual who is involved in a vigorously active vocation, this might provide the needed physical

⁴⁰Gladys M. Scott, "The Contributions of Physical Activity to Psychological Development," Research Quarterly, XXXI (May, 1960), pp. 307-320. In "The Wear and Tear of Life," Today's Health, XXXVII (January, 1959), p. 24, Hans Solyo believes that the body will have a chance to retain its equilibrium if the form of stressful activity is changed.

relaxation. However, vocations which are sedentary by nature or very demanding physically can be quite routine with little of the total "self" involved.

Physical activities selected judiciously can be a desirable solution for these problems. Many sports, such as badminton, golf, tennis, and swimming, can vary extremely in the demand placed on the individual; that is to say, the effort extended and the energy expended may be anywhere along a continuum from minute to excessive. Therefore, sports of this nature are referred to as life-time sports. They do not require a large group to participate, they provide healthful exercise, they give an individual an opportunity for other avenues of expression or communication, and they allow him to reduce tensions and anxieties in an acceptable way. Throwing dishes, striking others, and tearing up the furniture have not been considered desirable ways to release one's pent-up emotions; however, hitting a golf ball or a tennis ball is acceptable as well as a pleasurable and healthy way to reduce tensions.

Behavioral scientists tend to agree that people engage in activities which they have come to understand and appreciate and which bring satisfaction and pleasure. Some moralists rebel at the pleasure-ridden society of today, and perhaps, rightly so, in the narrow context of their interpretation of pleasure as sensual gratification or frivolous amusement. However, pleasure can imply the sense of joy or delight which comes from hitting the ball well on the golf course, increasing your bowling average, conquering the slalom ski, engaging in deep conversation with friends, hearing a brilliant rendition of one of your favorite operas, reading a new intriguing book, or perhaps making something for your home in the workshop. Although some teachers tend to

reduce the possibility, pleasure can be an important outcome of all learning.

If the student in his undergraduate program has the opportunity to gain confidence in his ability to perform in one or more of the individual or dual sports, he is more likely to include participation in them in his future free time. This will provide him a pleasurable way to remain physically active, it will provide him an avenue for meeting new people and for social interaction with friends and family, and it will be a socially acceptable outlet for relieving the tensions brought on by a fast-living, fast-moving world. The psychologist-philosopher, William James, supported the need for physical activity in man's life by saying:

Even if the day ever dawns in which it will not be needed for fighting the old heavy battles against nature, muscular vigour will still always be needed to furnish the background of sanity, serenity, and cheerfulness to life, to give more elasticity to our disposition, to round off the wiry edge of our fretfulness, and make us good-humoured and easy of approach.⁴¹

Catherine Allen believes that the leisure of today's society will determine its place in history, and stresses the urgency of "influencing people of all ages in the constructive use of ever-increasing leisure."⁴² Brightbill reminds one that no civilization has possessed leisure in a large quantity and survived.⁴³ In fact, many historians, philosophers, politicians, and sociologists have emphasized "that the quality of any

⁴¹ A. Lerin, "Exercise and Holidays," The Health of Business Executives (London, 1960).

⁴² Catherine L. Allen, "The Need for Personal Commitment Among Physical Educators," Proceedings, Southern Association for Physical Education of College Women, February, 1963.

⁴³ Brightbill, Charles K. Man and Leisure (Englewood Cliffs, N. J., 1961), p. 192.

society's leisure activity sets the tone of that society and, in effect, measures the level of its civilization.⁴⁴ It seems reasonable to believe that if a child is truly himself while at play, an adult displays his true nature during his leisure time.

The concept of leisure has undergone many changes with the realization of its great impact on contemporary society. The Greeks thought of leisure as an end, the good life; however, leisure and education were both reserved for the well-born. In contrast to this view, as the nineteenth century progressed leisure became instrumental in character, and more people looked to time after necessary work and obligations to spend for relaxation and re-creating themselves for further work. Webster's Seventh Collegiate Dictionary definition is inadequate in contemporary thought as it defines leisure as the "time at one's command that is free of engagements or responsibilities." Miller and Robinson defined leisure as "the complex of self-fulfilling and self-enriching values achieved by the individual as he uses leisure time in self-chosen activities that recreate him."⁴⁵ This modern concept blends "leisure as an end and as a means of relaxation and revitalization."⁴⁶

Although man's future will still depend on a work life that is satisfying and provides the basic needs, leisure seems to be the integrating factor in life and the major source of value. J. D. Hodgson, the Secretary of Labor, views leisure time for the future American worker as

⁴⁴Norman P. Miller, and Duane W. Robinson, The Leisure Age (Belmont, Calif., 1963), p. 3.

⁴⁵Ibid.

⁴⁶Max Kaplan, "New Concepts of Leisure Today," Journal of Health, Education, and Recreation (March, 1972), pp. 42-46.

his opportunity to find self-direction and self-fulfillment in a world where the quality of living is deteriorating.⁴⁷

The European Recreation Congress in June, 1970, agreed upon a "Charter for Leisure", which was developed by a special committee appointed by the International Recreation Association in 1967. The charter has been adopted by all types of agencies involved in recreation, and the philosophy has been well-expressed in the preface to the charter:

Preface: Leisure time is that period of time at the complete disposal of an individual, after he has completed his work and fulfilled his other obligations. The uses of this time are of vital importance.

Leisure and recreation create a basis for compensating for many of the demands placed upon man by today's way of life. More important, they present a possibility of enriching life through participation in physical relaxation and sports, through an enjoyment of art, science, and nature. Leisure is important in all spheres of life, both urban and rural. Leisure pursuits offer man a chance of activating his essential gifts (a free development of the will, intelligence, a sense of responsibility and creative faculty). Leisure hours are a period of freedom, when man is able to enhance his value as a human being and as a productive member of his society.

Recreation and leisure activities play an important part in establishing good relations between peoples and nations of the world.⁴⁸

America is a country with an abundance of wealth and leisure time unparalleled in history; however, America has been built upon the "work" principle. In the industrial society, the virtues of work were extolled and work was the main source of self-fulfillment for the individual; however, it appears that it is time to reconsider the Aristotelian view

⁴⁷J. D. Hodgson, "Leisure and the American Worker," Journal of Health, Physical Education, and Recreation (March, 1972), pp. 38-39.

⁴⁸Ibid.

that the aim of education is the wise use of leisure time and accord the virtues of leisure its proper place of importance.

The author does not intend to imply with this discussion that tennis, golf, paddle-ball, swimming, dancing, etc., should be the only avenues of recreation during leisure time. Many people will engage in a variety of activities, and certainly, the retired citizen will need a host of interests to occupy his days. Arts and crafts, music, literature, drama, science, and many other disciplines in higher education have much to offer the student in preparing him for his future free time. The opportunities provided in physical education for the development of a satisfactory level of skill performance in a variety of leisure-time activities, and the social interaction of the learning environment can enhance the individual's use and concept of leisure to help meet both his present and future needs.

In modern society sport is both a social and cultural institution playing a prominent role in the lives of many Americans. Page ventured the idea that the influence of sports on the larger culture rivals the impact of the Negro culture and the so-called youth culture on the larger culture. He stated that "our general life style is increasingly a sporting style" and suggested the general hypothesis, "that the playing field and the gymnasium provide a salient measure of the worthwhile, at least in modern American life."⁴⁹ Even though a minority of people are player-participants in collegiate or professional sports, the followers of these kinds of events, whether in person or by television, are

⁴⁹Charles H. Page, "Symposium Summary, With Reflections Upon the Sociology of Sport as a Research Field," Sociology of Sport, ed. Gerald S. Kenyon (Chicago, 1969), pp. 193-195.

a vast number. Throngs of people in communities across the United States are devoted supporters of their school athletic programs and the little-league sports. Physical education can help students to gain appreciations, knowledges, understandings, and attitudes that will make it possible for them to more thoroughly enjoy their passive involvement in sporting activities.

No one could deny the need for improved social behavior at competitive athletic events. A socially mature person is capable of managing his emotions satisfactorily even in intense situations and acts in a sportsmanlike manner.⁵⁰ Physical education activities can be stimulating and emotionally charged, and can aid the student in developing social maturity. Many sociologists and psychologists recommend guided activity programs for directing anti-social behavior into more desirable patterns of action.⁵¹

The advancement of knowledge in the sociology of sport has gained much attention in recent years. Studies have shown the dependency of local community life on sports events and the persistence of many people to maintain this way of life. It has also been found that individual sports have become recreational activities for people at almost all class levels in the United States. Figures now indicate that as spectatorship and professionalism grow, so does participation.⁵² Page said,

Sport is a way of life involving both sacred and secular traditions, as you all know. It involves ever-changing lores and customs, different styles of rhetoric, and, as I suggested

⁵⁰ Ibid.

⁵¹ Robert N. Singer et al., Physical Education: An Interdisciplinary Approach (New York, 1972), p. 141.

⁵² Page, pp. 189-202.

earlier, both terminal and instrumental values.⁵³

The writer believes the most important contribution of physical education toward attaining the behavioral goals of general education is assisting the student to develop a "healthy personality" through the use of purposeful human movement and that all of the previously mentioned objectives of physical education play a significant role in the development of a "healthy personality". Although numerous psychologists, such as Maslow, Rogers, Fromm, and Allport,⁵⁴ have expressed similar views, Sidney Jourard provided the following definition of a "healthy personality":

Healthy personality is manifested by the individual who has been able to gratify his basic needs through acceptable behavior such that his own personality is no longer a problem to him. He can take himself more or less for granted and devote his energies and thoughts to socially meaningful interests and problems beyond security, or lovability, or status.⁵⁵

Jourard referred to the body as "the meeting ground of psychology and physiology" because "an individual behaves with his body, and his behavior produces consequences for his body,"⁵⁶ and he used the term "healthy personality" to refer to "modes of behavior which are valued because they gratify needs, are appropriate to the person's age and

⁵³ Ibid., p. 195.

⁵⁴ For an in-depth study, see the following authors and their interpretations: A. H. Maslow, Motivation and Personality, chp. xii (New York, 1954); Carl R. Rogers, On Becoming a Person (Boston, 1961), pp. 163-198; Erich Fromm, Man for Himself (New York, 1966), pp. 58-122; and G. W. Allport, "Personality: Normal and Abnormal," Sociological Review, VI (1968), pp. 167-180.

⁵⁵ Sidney M. Jourard, Personal Adjustment, 2nd ed. (London, 1969), p. 21.

⁵⁶ Ibid., p. 122.

society, his personal value-system, and the immediate situation."⁵⁷ He stated further that a healthy personality "implies success at the art of living, loving, and fulfilling one's potentials."⁵⁸

In this ever exceedingly complex society "man" is truly frustrated in achieving identity and in becoming a mature and rational being capable of coping with his dynamic environment. The writer contends that the college is obligated to provide meaningful experiences which will allow the individual an opportunity for: (1) self-realization, the attainment of individuality and an awareness of his unique being, and for (2) socialization, the ability to relate to the world by relating to people and to oneself. Self-realization and socialization are necessary components of a healthy personality.

Social scientists refer to "developmental tasks" as learning how to control new forms of behavior that appear at different stages of growth. Fisher and Noble stated that an individual must learn how to behave at each stage of development to be able to adjust to the following three important factors that vary with age:

- (1) bodily growth and physical maturation;
- (2) the expectations of important people in his life, partly affected by cultural pressures and social demands;
- (3) his own individual aspirations and values.⁵⁹

The satisfactory adjustment of one's behavior at the appropriate time to the above three factors determines whether an individual will achieve success in mastering each developmental task. If an individual fails in

⁵⁷Ibid., p. 25.

⁵⁸Ibid., p. 24.

⁵⁹Margaret B. Fisher and Jeanne L. Noble, College Education as Personal Development (Englewood Cliffs, N. J., 1960), p. 25.

the accomplishment of a task at one stage, there can be delays and difficulties in later tasks. New developmental tasks appear from birth to death, and they form a continuous and irreversible sequence of progressively complex tasks. One of the best known examples of such a developmental sequence is Erikson's concept of the personality, or self, developing through eight stages of growth.⁶⁰ Erikson said that in each of these stages:

. . . the inner laws of development create a succession of potentialities for significant interaction with those who tend him. While such interaction varies from culture to culture, it must remain the proper rate and the proper sequence which govern the growth of a personality as well as that of an organism--Personality can be said to develop according to steps predetermined in the human organism's readiness to be driven toward, to be aware of, and to interact with a widening social radius, beginning with the dim image of a mother and ending with mankind, or at any rate that segment of mankind, which "counts" in the particular individual's life.⁶¹

The sixth stage (ages 16-20) was classified by Erikson as young adulthood or the age of "intimacy versus isolation" stage of development. A similar concept was developed by Robert Havighurst, a social psychologist, who has been particularly interested in studying the developmental tasks of the college age.⁶² Havighurst regarded the "achieving of identity" as the major developmental task of the college student, and suggested the following six tasks for the student to master in order to achieve identity as an adult:

⁶⁰Erik Erikson, "Growth and Crimes of the Healthy Personality," Personality in Nature, Society, and Culture, eds. Clyde Kluckheln and Henry Murray, 2nd, ed. (New York, 1953), p. 187.

⁶¹Ibid.

⁶²Robert Havighurst, "Research on the Developmental Task Concept," The School Review, XIV (May, 1956), pp. 216-218, as found in Noble and Fisher, pp. 26-27.

- 1) Learning a masculine or feminine social role.
- 2) Accepting one's body.
- 3) Achieving emotional independence of parents.
- 4) Achieving new and more mature relations with age mates of both sexes.
- 5) Selecting and preparing for an occupation.
- 6) Achieving a scale of values and an ethical system to live by.⁶³

Generally, the student's physical development has fairly well stabilized by the time he enters college, and the body type he will have throughout the rest of life is established. However, the college physical education experience can provide many different kinds of opportunities for cultivating an acceptable body image. The body image includes all of a person's perceptions, beliefs, and expectancies with respect to his body's structure, functions, and appearance. It is not simply a picture of oneself, but also a value judgment of the worth of self. It is an estimate of comparative physical attractiveness, of desirability, of ability to compete with others for admiration and acceptance which ideally permits the student to accept his own idiosyncratic dimensions and features. Jourard stated:

Healthy acceptance of the body implies doing one's best to foster optimum functioning and attractive appearance and then enjoying one's body as a part of life--using it with care and enjoying its capacity to yield pleasure as well as to do work.⁶⁴

A clear sense of identity based on an acceptable image of how one looks and feels is vitally important to the establishment of feminine or masculine roles; in fact, Noble and Fisher said that, "understanding the body is needed in order to be somebody."⁶⁵

⁶³ Ibid.

⁶⁴ Jourard, p. 146.

⁶⁵ Noble and Fisher, p. 37.

Sex has to be accepted as part of the body image, but sex is also used as a basis for determining appropriate social roles. Society has prescribed some dominant sex roles, such as wife and mother, husband and father, and some secondary sex roles become patterns of behavior which characterize a particular culture. The acceptance of all the secondary roles for that sex is not a necessity in order for an individual to accept "sex" as a part of the body image; however, it is important that the individual identify with masculine or feminine roles or reject them in order to come to a point of self-understanding, or as has been referred to previously as "self-realization". In addition to individual self-realization, Noble and Fisher stated that "sex role identity leads to fulfillment in an intimate, loving, caring relationship with another person."⁶⁶

Coeducational physical education experiences can provide opportunities for students to relate informally with members of the opposite sex in a variety of activities. Ulrich stated that "movement is the overt interpretation of personality and relates the self to others through a symbol language that has meaning."⁶⁷ And, Berelson and Steiner said that "the more people associate with one another under conditions of equality, the more they come to share values and norms and the more they come to like one another."⁶⁸ The appropriate environment can be provided in physical education for men and women students to learn masculine and feminine social roles without the narrow concept of "masculine"

⁶⁶ Ibid., p. 60.

⁶⁷ Ulrich, p. 39.

⁶⁸ Bernard Berelson and Gary A. Steiner, Human Behavior: An Inventory of Scientific Findings (New York, 1964), p. 327.

and "feminine" stereotypes being imposed on them. Men and women can have meaningful experiences through movement activities in physical education which will contribute to self-appraisal and self-realization as well as develop social efficiency for satisfactory adjustment of life. Singer said, "there are a number of possible methods of molding a more socially accepted personality, and one of the better means is through participation in organized physical activity."⁶⁹

In sport, as in the game of life, an individual may learn to give and take, to cooperate in an organized effort toward a common goal, to value unique individual performance, to respect the need for control by an authoritative figure, to win and lose graciously, and to discipline their mind, body, and emotions. The absorption in activity yields a sense of knowing, a kind of bodily communication in which the total organism collaborates to report its encounter with experience. Arthur Steinhouse has most eloquently developed the idea that, in sport and dance, man is truly a functioning integrated whole engaged in activity which approximates "real life".⁷⁰

Group standards and mores of behavior can be guided into socially acceptable patterns of behavior through participation in sports and/or other physical education experiences. The group interaction provides an opportunity to better understand the feelings and rights of others, and provides each individual an opportunity to gain status and self-confidence through improvement of his skills. The experiences in physical education can challenge development of initiative and perseverance

⁶⁹Singer, p. 140.

⁷⁰Arthur H. Steinhouse, Toward an Understanding of Health and Physical Education (Dubuque, Iowa, 1963), Part I.

in setting and attaining goals, can demand the making of quick decisions based on sound reasoning and valid judgment, and can assist the students to make intelligent choices among conflicting courses of action. Physical education experiences can provide opportunities for development of both a cooperative attitude and a competitive spirit.

All experiences which lend themselves to the development of self-realization and socialization, such as physical education provides, can contribute to the development of the skills, insights, and attitudes which are needed to be successful "leaders" and/or "followers".

In the process of achieving identity, which encompasses self-realization and socialization, the college student needs both physical and intellectual capacities challenged, and needs to acquire the skills and abilities which will permit him to respond to the challenge of "life" with confidence in himself and his "society". A physiologically and psychologically supportive environment in physical education can contribute significantly in helping the student discover "who he is", "what he's doing", and "where he's going". Human feelings, such as success or failure, acceptance or rejection, courage or fear are revealed through overt acts in movement experiences and provide an avenue for better understanding of oneself. The student can be involved in experiences which can help him recognize his individual shortcomings and make adjustments to them. The concepts of normality can be explored so that each student can see himself in relationship to his peers and be better able to judge, not if he is doing what everyone else is doing, but if what he is doing is best for him. As the student participates in activities and becomes aware of his movement potential, capabilities, and limitations, he will be furthering his understanding

of himself. In the process of "finding himself", the student will develop skills of social interaction and the coping behaviors which are necessary for self-confidence.

Physical education at the college level can help the student understand the role of sports in American culture, the relationship between physical fitness and the total being, the degree to which feelings about physical education have influenced attitudes toward life, the danger of too much leisure without positive attitudes toward it, and the relationship between the biological and emotional endowments. The student has many opportunities in organized activities to learn to accept his body or reject it, and to feel better or worse about himself, but never neutral, and to develop a balance between work and leisure or live under constant stress.

In a discussion of optimum education of the whole man, Earl V.

Pullias declares:

I have long been convinced that the part of education usually called physical education, including health and recreation, has a contribution of incomparable value to make to the education of the whole man. The current tendency to downgrade those phases of education in the face of the demands of modern life seems to me little short of madness.⁷¹

⁷¹Earl V. Pullias, Search for Understanding (Dubuque, Iowa, 1965), p. 97.

CHAPTER V

SUMMARY AND CONCLUSIONS

The writer has investigated the contributions of physical education toward attaining the behavioral goals of general education. The procedure was to determine the nature of man, the role of learning for the student of the 1970's-1980's, the goals of general education in the undergraduate curriculum in colleges and universities, and the potential contributions of physical education toward achieving these goals based on the nature of man and the role of learning.

Man is a unique being capable of intelligent, reflective behavior. Man is mind, spirit, and body functioning as an integrated whole as he strives to find happiness within himself and with others and in achieving full realization of his capacities.

Man is consciously or unconsciously learning during all experiences, and learning experiences in the general education program which encourage the student to adapt, to generalize as well as to specialize, and to apply are essential to create an atmosphere for effective learning of broad concepts and principles. Learning is not the acquisition of a body of information or the mastery of skills; it is learning to think, and developing the rationale and the insights necessary for making significant decisions. If the student is to find his distinct and purposeful role in the 1970's and the 1980's, he needs to experience learning which is usable and transferrable to different situations.

The major goal of the university is the development of the "whole man", and the "general education" is that part of the undergraduate experiences concerning itself with similarities rather than differences of man in relation to his needs and interests as an individual, as a family member, and as a citizen in a democratic society. The goals of general education and professional education should be interrelated with all learning experiences, whether formal or informal, and integrated into meaningful concepts for the development of the "whole man".

This study points up the interrelatedness of the goals of general education with all of them directed toward the development of the "whole man". Many varieties of learning experiences, some are structured and some are non-structured, contribute to the behavioral goals of general education and the major goal of the university. The student who understands his interaction with his biological and physical environment so that he may better adjust to and improve that environment is most likely to develop a balanced personal and social adjustment. This student has the potential for maintaining good mental and physical health for himself, his family, and his community and for sharing in the development of a satisfactory home and family life. This individual will be equipped to discriminate among values and have developed a set of moral and spiritual values by which he guides his life. This individual will be capable of using methods of critical thinking for the solution of problems, and will be capable of exercising the privileges and responsibilities of democratic citizenship. The goals of general education have a distinct relationship one to another.

Physical education is concerned with the total development of man through the medium of purposeful movement. It is this writer's earnest

conviction that physical education experiences which are designed to:

(1) promote the attainment and maintenance of an optimal level of health, (2) assist in the development of a "healthy personality" through opportunities for "self-realization" and "socialization", (3) develop moral and ethical values and attitudes, and (4) develop skills for wholesome use of leisure, can make very valuable and critical contributions to individual abilities which are necessary to the attainment of all the behavioral goals of general education.

If the goals of general education are to be attained, educators must stop trying to instruct segmented aspects of human beings and design programs which view man as an individual and an individual that is an integrated whole giving attention to all of the needs, abilities, and interests of the students. The cooperation and combined efforts of all educators responsible for the learning experiences in the undergraduate program are essential if "the student" is to be truly the focal point of general education.

BIBLIOGRAPHY

- Allen, Catherine L. "The Need for Personal Commitment Among Physical Educators." Proceedings. Knoxville, Tenn.: Southern Association for Physical Education of College Women, February 20-22, 1963.
- Allport, Gordon W. Becoming: Basic Considerations for a Psychology of Personality. New Haven, Conn.: Yale University Press, 1955.
- _____. Pattern and Growth in Personality. New York: Holt, Rinehart and Winston, 1961.
- _____. Personality and Social Encounter. Boston, Mass.: Beacon Press, 1960.
- _____. "Personality: Normal and Abnormal." Sociological Review, VI (1958), 167-180.
- Aly, Martha. "Leisure in America: Implications for College Students." The Physical Educator, XIX (May, 1962), 45-48.
- The American Academy of Physical Education. The Academy Papers, No. 4, (April 1-2, 1970). Tucson, Arizona: The American Academy of Physical Education, 1970.
- _____. The Academy Papers, No. 5, (March 31 - April 1, 1971). Tucson, Arizona: The American Academy of Physical Education, 1971.
- American Association for Health, Physical Education, and Recreation. Developing Democratic Human Relations. Washington, D. C.: American Association for Health, Physical Education, and Recreation, 1951.
- _____. Knowledge and Understanding in Physical Education. Washington, D. C.: NEA Publications-Sales, 1969.
- _____. The Need for Increased Attention to Health and Physical Fitness of Americans. Washington, D. C.: American Association for Health, Physical Education, and Recreation, n.d.
- _____. Physical Education for College Men and Women. Washington, D. C.: NEA Publications-Sales, 1965.
- Andrews, Emily R., et al. Physical Education for Girls and Women. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963.

- Antz, Louise, "Johann Heinrich Pestalozzi." The Encyclopedia Americana, XXI. New York: Americana Corporation, 1960.
- Archambault, Reginald D. John Dewey On Education. New York: Random House, Inc., 1964.
- Balke, Bruno. "Body or Brain: Problems of Survival," The Academy Papers, (October, 1970), 25.
- Barrett, Kate R. "The Structure of Movement Tasks--A Means for Gaining Insight into the Nature of Problem Solving Techniques." Quest, XV (January, 1971), 22-31.
- Bearden, F. W. "God's Holy Temple," The Physical Educator, XIX (December, 1962), 145-156.
- Benson, Frank T. "General Education and the Pervasive Outcomes." Current Issues In Higher Education, (1962), 210-213.
- Berelson, Bernard, and Gary A. Steiner. Human Behavior: An Inventory of Scientific Findings. New York: Harcourt, Brace & World, Inc., 1964.
- Berger, Bennett M. "The Sociology of Leisure: Some Suggestions." Work and Leisure--A Contemporary Social Problem, ed. Erwin O. Smigel. New Haven, Conn.: College and University Press, 1963.
- Berlin, Pearl. "Prolegomena to the Study of Personality by Physical Educators." Quest, XIII (January, 1970), 54-62.
- Berman, Louise M. New Priorities in the Curriculum. Columbus, Ohio: Charles E. Merrill Publishing Company, 1968.
- Bierman, A. K., and James A. Gould. Philosophy for a New Generation. New York: The Macmillan Company, 1970.
- Bischof, Ledford J. Adult Psychology. New York: Harper & Row, Publishers, 1969.
- Bleier, T. J., and David Reams. "An Approach to Developing Physical Fitness as an Integral Part of the Physical Education Program," The Physical Educator, XXV (December, 1968), 164-167.
- Block, James H. (ed.). Mastery Learning: Theory and Practice. New York: Holt, Rinehart and Winston, Inc., 1971.
- Bloom, Benjamin S. (ed.). Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay Co., Inc., 1956.
- Bookwalter, Karl W., and Harold J. Vanderzwaag. Foundations and Principles of Physical Education. Philadelphia, Pa.: W. B. Saunders Company, 1969.

- Bower, Eli M. "Mental Health in Education." Review of Educational Research, XXXVIII (December, 1968), No. 5, 447-459.
- Brackenbury, Robert L. "Physical Education, An Intellectual Emphasis?" Quest, I (December, 1963), 3-6.
- Broekhoff, Jan. "Chivalric Education in the Middle Ages." Quest, XI (December, 1968), 24-31.
- Broer, Marion R. Efficiency of Human Movement. Philadelphia, Pa.: W. B. Saunders Company, 1960.
- Brown, Camille. "The Structure of Knowledge of Physical Education." Quest, IX (December, 1967), 53-67.
- Brown, Camille, and Rosalind Cassidy. Theory in Physical Education: A Guide to Program Change. London: Henry Kimpton, Medical Publisher and Bookseller, 1963.
- Brown, George I. "Feel-Out." Think-In: Medium for Change, ed. Joan C. Waterland. Madison, Wisconsin: Advertisers Press, August 23-28, 1970.
- Brubacher, John S. Modern Philosophies of Education. 4th ed. New York: McGraw-Hill, 1969.
- Bruner, J. S. The Process of Education. Cambridge, Mass.: Harvard Press, 1961.
- Buber, Martin. Between Man and Man. London: Kegan Paul, Trench, Trubner & Co., 1947.
- _____. "Elements of the Interhuman." Models of Man, Paul Nash, New York: John Wiley & Sons, 1968.
- Bucher, Charles A. Foundations of Physical Education. 5th ed. St. Louis, Mo.: The C. V. Mosby Company, 1964.
- Campbell, Keith. Body and Mind. "Anchor Books": Garden City, N. Y.: Doubleday & Co., Inc., 1970.
- Chickering, Arthur W. Education and Society. San Francisco, Calif.: Jossey-Boss Inc., Pub., 1971.
- Christina, Robert. "The Relationship of Kinesthesia to Physical Education." The Physical Educator, XXIV (December, 1967), 167-168.
- Clarke, H. Harrison. "Physical Fitness Benefits: A Summary of Research." Education, LXXVIII (April, 1958), 460.
- Cogan, Max. "Creative Approach to Physical Education." National College Physical Education Association for Men, 73rd Proceedings, Minneapolis, Minn.: University of Minnesota, 1970.

- Coon, Roger. "Sportsmanship, A Worthy Objective." The Physical Educator, XXX (March, 1964), No. 1, 16-18.
- Cooper, Kenneth H. The New Aerobics. New York: M. Evans & Co., Inc., 1970.
- Corbin, Charles B., et al. Concepts in Physical Education. Dubuque, Iowa: Wm. C. Brown Co., 1970.
- Cowell, Charles C. "Interpreting Physical Education through Contrasting Philosophies." The Physical Educator, XX (December, 1963), 147.
- Cowell, Charles C., and Wellman L. France. Philosophy and Principles of Physical Education. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963.
- Cratty, Bryant J. Psychology and Physical Activity. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1968.
- _____. " 'Schema With Correction' and Motor Learning." The Physical Educator, XX (March, 1963), No. 1, 23-24.
- _____. Social Dimensions of Physical Activity. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1967.
- Criswell, Eleanor, and Severin Peterson. "The Whole Soul Catalog." Psychology Today, V (April, 1972), No. 11, 57-64.
- Daughtrey, Greyson. Methods in Physical Education and Health for Secondary Schools. Philadelphia, Pa.: W. B. Saunders Company, 1967.
- Davies, Robert M. "The Process of Liberal Education." Improving College and University Teaching, 48-50.
- Davis, Elwood Craig (ed.). Philosophies Fashion Physical Education. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1963.
- _____. "The Power of Beliefs." Quest, I (December, 1963), 7-12.
- Davis, Elwood Craig, Gene A. Logan, and Wayne C. McKinney. Biophysical Values of Muscular Activity. 2d. ed. Dubuque, Iowa: Wm. C. Brown Co., 1965.
- Davis, Elwood Craig, and Donna Mae Miller. The Philosophic Process in Physical Education. 2d. ed. Philadelphia, Pa.: Lea & Febiger, 1967.
- Deach, Dorothy F. "The Challenge of Movement Education." The Physical Educator, XVIII (October, 1961), 92-93.
- The Department of Physical Education. The Contributions of Health Education and Physical Education to the General Education of Students at the Ohio State University. Ohio State University, November, 1960.

- Dewey, John. Democracy and Education. New York: The Macmillan Company, 1963.
- _____. "My Pedagogic Creed." The School Journal, LIV (January 16, 1897), No. 3, 77-80.
- _____. On Experience, Nature, and Freedom. Ed. Richard J. Bernstein. New York: The Liberal Arts Press, 1960.
- Dressel, Paul L. College and University Curriculum. Berkeley, Calif.: McCutchan Publishing Corporation, 1968.
- Dressel, Paul L., and Irvin J. Lehmann. "The Impact of Higher Education on Student Attitudes, Values, and Critical Thinking Abilities." The Educational Record. (Summer, 1965), 248-258.
- Eby, Frederick. The Development of Modern Education. 2d. ed. New York: Prentice-Hall, Inc., 1952.
- The Educational Policies Commission. Higher Education in a Decade of Decision. Washington, D. C.: National Education Association, 1963.
- _____. Social Responsibility in a Free Society. Washington, D. C.: National Education Association, 1963.
- Eisenhower, Dwight David. Speech before Youth Fitness Conference, Washington, D. C.: June 16, 1956.
- Elliott, Patricia A. "The Beneficial Outcomes of Requiring Coeducational Programs." Journal of Health, Physical Education, Recreation, XLIII (February, 1972), No. 2, 35-36.
- Erikson, Erik. "Growth and Crises of the Healthy Personality." Personality in Nature, Society, and Culture. 2d ed. Eds. Clyde Kluckhohn and Henry Murray. New York: Alfred A. Knopf, 1953.
- Eurich, Alvin C. (ed.). Campus 1980. "A Delta Book." New York: Dell Publishing Co., Inc., 1968.
- Fairs, John R. "The Influence of Plato and Platonism on the Development of Physical Education in Western Culture." Quest, XI (December, 1968), 14-23.
- Felshin, Janet. Perspectives and Principles for Physical Education. New York: John Wiley and Sons, Inc., 1967.
- Fisher, Margaret B., and Jeanne L. Noble. College Education as Personal Development. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960.
- Fraleigh, Warren P. "Should Physical Education Be Required?" The Physical Educator, XXII (March, 1965), 25-30.

- Freeman, Toby. "Fitness For The Space Age." Quest. III (December, 1964), 31-35.
- Fromm, Erich. Man for Himself. 3rd. ed. New York: Fawcett World Library, 1966.
- _____. The Sane Society. New York: Rinehart, 1955.
- Gerber, Ellen W. "Identity, Relation and Sport." Quest. VIII (May, 1967), 90-97.
- _____. "Learning and Play: Insights of Educational Protagonists." Quest, XI (December, 1968), 44-49.
- Gilson, Etienne H. The Christian Philosophy of Saint Augustine. Translated by L. E. M. Lynch. New York: Random House, 1960.
- _____. The Christian Philosophy of Saint Thomas Aquinas. Translated by L. K. Shook. New York: Random House, 1956.
- Gladstone, Roy. A Set of Principles of Teaching Derived from Experimental Psychology. 3rd. ed. Stillwater, Oklahoma: By the Author, 2006 West Tenth Avenue, 1968.
- Goals for Americans. Report of the President's Commission on National Goals and Chapters Submitted for the Consideration of the Commission. "A Spectrum Book". New York: Prentice-Hall, Inc., 1960.
- Golding, Lawrence A., and Ronald R. Bos. Scientific Foundations of Physical Fitness Programs. 2d. ed. Minneapolis, Minn.: Burgess Publishing Company, 1967.
- Gulley, Norman. Plato's Theory of Knowledge. London: Methuen, 1962.
- Guzie, Tad W. The Analogy of Learning. New York: Sheed and Ward, 1960.
- Hackensmith, C. W. History of Physical Education. New York: Harper and Row, 1966.
- Hallatt, Douglas, and W. C. Koenig. "The 'Hows' or the 'Whys'--Which Comes First?" The Physical Educator, XXIV (December, 1967), 171-172.
- Halsey, Elizabeth. Inquiry and Invention in Physical Education. Health Education, Physical Education, and Recreation Series. Philadelphia, Pa.: Lea & Febiger, 1964.
- Harper, William. "Man Alone." Quest, XII (May, 1969), 57-60.
- Havighurst, Robert. "Research on the Developmental Task Concept." The School Review, XXIV (May, 1956), 216-218.

Havighurst, Robert J., and Bernice L. Neugarten. Society and Education. Boston: Allyn and Bacon, Inc., 1962.

Health and Fitness in the Modern World. Chicago: The Athletic Institute, 19-61.

Hein, Fred V., and Allan J. Ryan. "The Contributions of Physical Activity to Physical Health." Research Quarterly, XXXI (May, 1960), 263-285.

Hellebrandt, Frances A. "The Autonomous Component of Willed Movement." The Physical Educator, XIX (March, 1962), 25-27.

Hellison, Donald R. "Physical Education and the Self-Attitude." Quest, XIII (January, 1970), 41-45.

_____. "Toward Acquiring a Perspective for Value Orientations in Physical Education." The Physical Educator, XXV (December, 1968), 152-153.

Henderson, Algo D. The Innovative Spirit. San Francisco, Calif.: Jossey-Boss, 1970.

Henderson, Joe M. "An Innovation in Higher Education." The Physical Educator, XXV (December, 1968), 150-151.

Hendry, L. B. "Some Notions on Personality and Sporting Ability: Certain Comparisons With Scholastic Achievement." Quest, XIII (January, 1970), 63-73.

Higher Education for American Democracy. Report of the President's Committee on Higher Education. Washington: U. S. Government Printing Office, 1947.

Hilgard, Ernest R. Theories of Learning. 2d. ed. New York: Appleton-Century-Crofts, Inc., 1956.

Hilgard, Ernest R., and Gordon H. Bower. Theories of Learning. 3rd. ed. New York: Appleton-Century-Crofts, 1966.

Hill, Winfred F. Learning: A Survey of Psychological Interpretations. Rev. ed. Scranton, Pa.: Chandler Publishing Company, 1971.

Hillway, Tyrus. Introduction to Research. 2d. ed. Boston, Mass.: Houghton Mifflin Co., 1964.

Hodgson, J. D. "Leisure and the American Worker." Journal of Health, Physical Education and Recreation (March, 1972), 38-39.

Holbrook, Leona. "A Teleological Concept of the Physical Qualities of Man." Quest, I (December, 1963), 13-17.

Holmes, Thomas II., and Minoru Masuda. "Psychosomatic Syndrome." Psychology Today, V (April, 1972), No. 11, 57-64.

- Hubbard, Alfred W. "Some Thoughts on Motivation in Sport." Quest, X (May, 1968), 40-46.
- Kennedy, John F. A Presidential Message to the Schools on the Physical Fitness of Youth, Press Conference, July 20, 1961.
- _____. "The Soft American." Sports Illustrated, (December 26, 1960), Zerox copy.
- Kenyon, Gerald S. (ed.). Aspects of Contemporary Sport Sociology. Chicago, Ill.: The Athletic Institute, 1969.
- _____. "Sociological Considerations." Journal of Health, Physical Education and Recreation, XXXIX (November-December, 1968), 31-33.
- _____. "Sport Sociology: On Becoming a Sub-Discipline." New Perspectives of Man in Action, eds. Roscoe C. Brown, Jr. and Bryant J. Cratty. Englewood Cliffs: Prentice-Hall, 1969.
- Kierkegaard, Soren. The Point of View. "Harper Torch Book." New York: Harper and Row, 1962.
- Kiphuth, Robert. How To Be Fit. New Haven, Conn.: Yale University Press, 1963.
- Klausmeier, Herbert J., and William Goodwin. Learning and Human Abilities. 2d. ed. New York: Harper and Row, Publishers, 1961.
- Kleinman, Seymour. "Toward a Non-Theory of Sport." Quest, X (May, 1968), 29-34.
- Kohler, Wolfgang. The Place of Value In a World of Facts. "A Mentor Book." New York: The New American Library, 1966.
- Kraus, Hans, and Wilhelm Raab. Hypo-Kinetic Disease. Springfield, Mass.: Charles E. Thomas Publishers, 1961.
- Krech, David, Richard S. Crutchfield, and Egerton L. Ballachey. Individual In Society. New York: McGraw-Hill, 1962.
- Kroll, Walter, and Guy H. Lewis. "America's First Sports Psychologist." Quest, XIII (January, 1970), 1-4.
- Langton, Clair V. "Man and His Environment." Quest, III (December, 1964), 15-18.
- _____. et al. Principles of Health, Physical Education, and Recreation. New York: Ronald Press Company, 1962.
- Lawther, John D. The Learning of Physical Skills. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1968.
- Lee, James M. Principles and Methods of Secondary Education. New York: McGraw-Hill Book Co., Inc., 1963.

- LeFevre, Perry. Understandings of Man. Philadelphia, Pa.: The Westminster Press, 1966.
- _____. "Stress and Strain." The Physical Educator, XVII (March, 1960), 26-28.
- Huelster, Laura J. "The Body of Knowledge in Physical Education--Philosophical." The Physical Educator, XXII (March, 1965), 6-8.
- _____. "The Role of Sports in the Culture of Girls." Proceedings: Second National Institute on Girls Sports. Washington, D. C.: AAHPER, 1966.
- Hunsicker, Paul. Physical Fitness. Westwood, N. J.: Fleming H. Revell Co., 1963.
- Huxley, Julian. "The Evolutionary Vision." Evolution after Darwin, III. Ed. Sol Tax. Chicago: The University of Chicago Press, 1960.
- Ibrahim, Hilmi. "Character of American Sports." The Physical Educator, XXV (December, 1968), 147-149.
- Indiana AAHPER et al. Report of a Symposium on Integrated Development. Purdue University, June 29-30, 1964.
- Johnson, B. Lamar. General Education in Action. Washington, D. C.: American Council on Education, 1952.
- Johnson, Perry B., et al. Physical Education. New York: Holt, Rinehart and Winston, Inc., 1966.
- Johnson, Ralph H. "The Substance of the Image of College Physical Education." The Physical Educator, XXI (October, 1964), 99-101.
- Jourard, Sidney M. Personal Adjustment. 2d. ed. London: The Macmillan Company, 1963.
- _____. The Transparent Self. "An Insight Book." Princeton, N. J.: D. Von Nostrand Company, Inc., 1964.
- Junell, Joseph S. "Do Teachers Have the Right to Indoctrinate?" Phi Delta Kappan (December, 1969), 182-185.
- Kaelin, E. F. "The Well-Played Game: Notes Toward an Aesthetics of Sport." Quest, X (May, 1968), 16-28.
- Kamm, Robert B. "General Education and the Undergraduate Major." Current Issues in Higher Education, (1962), 125+.
- Kaplan, Max. "New Concepts of Leisure Today." Journal of Health, Physical Education, and Recreation (March, 1972), 42-46.

- Kastenbaum, Robert. "Getting There Ahead of Time." Psychology Today, X (December, 1971), No. 7, 59-61+.
- Leighton, Jack R. "Physical Education and Its Relation to General Education." The Physical Educator, XVIII (October, 1961), 89-91.
- Lerin, A. "Exercise and Holidays." The Health of Business Executives. London: The Chest and Heart Association, 1960.
- Lerner, Max. America as a Civilization. New York: Simon and Schuster, 1957.
- Locke, Lawrence F. Research in Physical Education: A Critical Review. New York: Teachers College Press, c. by Teachers College, Columbia University, n.d.
- Logan, Gene A., and Wayne C. McKinney. "How About Why?" The Physical Educator, XXII (December, 1965), 162.
- Loy, John W., Jr. "The Nature of Sport: A Definitional Effort." Quest, X (May, 1968), 1-15.
- Loy, John W., Jr., and Gerald S. Kenyon (eds.). Sport, Culture, and Society: A Reader on the Sociology of Sport. London: The Macmillan Company, 1969.
- Lucas, John A. "A Prelude to the Rise of Sport: Ante-bellum America, 1850-1860." Quest, XI (December, 1968), 50-57.
- Lunn, Sir Arnold. "Sports and Politics." Quest, I (December, 1963), 33-36.
- McCleary, Isabel S., and Thos. D. McDonough, Sr. "Competition and Cooperation," The Physical Educator, XX (March, 1963), No. 1, 9-11.
- McGrath, Earl J. The Liberal Arts College and the Emergent Caste System. Teachers College, Columbia University: Teachers College Press, 1966.
- McIntosh, P. C. Sport in Society. London: C. A. Watts and Co., 1963.
- Mackenzie, Marlin M. Toward A New Curriculum in Physical Education. New York: McGraw-Hill Book Company, 1969.
- Mager, Robert F. Developing Attitude Toward Learning. Palo Alto, Calif.: Fearon Publishers, 1968.
- Maltz, Maxwell. Psycho-Cybernetics. "Pocket Books." Simon and Schuster Inc., 1969.
- Maritain, Jacques. Existence and the Existent. Translated by Lewis Galantiere and Gerald B. Phelan. "Vintage Books." New York: Random House, 1966.

- Marx, Karl. "The Economic and Philosophical Manuscripts of Karl Marx." Marx's Concept of Man, by E. Fromm. New York: Frederick Ungar Publishing Co., 1961.
- Marx, Karl, and F. Engels. The German Ideology. New York: International Publishers Co., Inc., 1939.
- May, Rollo. Man's Search for Himself. New York: Norton, 1953.
- Mayhew, Lewis B. Contemporary College Students and the Curriculum. SREB Research Monograph No. 14. Georgia: SREB Boards, 1969.
- _____. (ed.). General Education: An Account and Appraisal. New York: Harper & Row, Publishers, 1960.
- Menninger, William C. Recreation and Mental Health. Reprinted from Recreation, November, 1948.
- Metcalf, Lawrence E., and Maurice P. Hunk. "Relevance and the Curriculum," Phi Delta Kappan (March, 1970), 358-361.
- Metheny, Eleanor. "The Amy Morris Homans Lecture: How Does a Movement Mean?" Quest, VIII (May, 1967), 1-6.
- _____. Connotations of Movement in Sport and Dance. Dubuque, Iowa: Wm. C. Brown Company, 1965.
- _____. Movement and Meaning. New York: McGraw-Hill Book Company, 1965.
- _____. "Philosophical Methods." Research Methods in Health, Physical Education, Recreation. 2d. ed. Edited by M. Gladys Scott. Washington, D. C.: American Association for Health, Physical Education, and Recreation, 1959.
- _____. "Physical Education and the Conservative-Liberal Debate." The Physical Educator, XIX (October, 1962), 86-88.
- _____. "This is Physical Education." The Foil (Official publication of Delta Psi Kappa) 50th Anniversary Issue, 1966.
- Michael, Donald N. The Next Generation. New York: Vintage Books, 1963.
- Michael, William B., and Ernest L. Boyer. "Campus Environment." Review of Educational Research, Chap. ii, XXXV (October, 1965), No. 4, 264-276.
- Miller, C. E. "Some Unique Personal Contributions of Physical Education: 'Life'." The Physical Educator, XXII (December, 1965), 169-171.
- Miller, Norman P., and Duane M. Robinson. The Leisure Age. Belmont, Calif.: Wadsworth Publishing Company, Inc., 1965.

- Milton, Ohmer, and E. J. Shoben, Jr. (eds.). Learning and the Professors. Athens, Ohio: Ohio University Press, 1968.
- Montoye, Henry J. The Body of Knowledge in Physical Education: Biological. Presented at the Thirty-Fourth Annual Meeting, American Academy of Physical Education. Minneapolis, Minnesota, May 1, 1963.
- Moolenijzer, Nicholaas J. "Our Legacy From the Middle Ages." Quest, II (December, 1968), 32-43.
- Morgan, William P. "Selected Psychometric Considerations." Quest, XIII (January, 1970), 5-11.
- Mosston, M. Developmental Movement. Columbus, Ohio: Charles E. Merrill Books, Inc., 1965.
- Nagel, Ernest. "Philosophy in Educational Research." Educational Research. Edited by Frank W. Banghart. Indiana: Phi Delta Kappa, Inc., 1960.
- Nash, Jay B. "The Moral Equivalent of Work." The Physical Educator, XXII (May, 1968), 51-52.
- _____. Physical Education: Its Interpretation and Objectives. Dubuque, Iowa: Wm. C. Brown Co., 1963.
- Nash, Paul. Models of Man. New York: John Wiley & Sons, Inc., 1968.
- Niebuhr, Reinhold. The Nature and Destiny of Man, I-1941, II-1943. New York: Charles Scribners Sons.
- Nixon, John E. "The Criteria of a Discipline." Quest, IX (December, 1967), 42-48.
- Nunn, Mary Sue, and Thos. E. McDonough. "Exercise and Diet--Obesity and Reducing." The Physical Educator, XXI (May, 1964), 51-53.
- Oberteuffer, Delbert. "On Learning Values Through Sport." Quest, I (December, 1963), 23-29.
- _____. "The Role of Physical Education in Health and Fitness." Michigan's Health (March, 1962), 19.
- Oberteuffer, Delbert, and Celeste Ulrich. Physical Education. 3rd. ed. New York: Harper and Row, Publishers, 1962.
- Ojemann, Ralph H. Personality Adjustment of Individual Children. Washington, D. C.: NEA, April, 1969.
- Oxendine, Joseph B. "Emotional Arousal and Motor Performance." Quest, XIII (January, 1970), 23-32.
- _____. Psychology of Motor Learning. New York: Appleton-Century-Crofts, 1968.

- Patterson, Ann, and Edmond C. Hallberg. Background Readings for Physical Education. New York: Holt, Rinehart and Winston, Inc., 1965.
- Peck, Robert F., and James V. Mitchell, Jr. Mental Health. Washington, D. C.: NEA, June, 1969.
- Pelton, Barry C. Collegiate Physical Education. Dubuque, Iowa: Wm. C. Brown Company, 1970.
- Perkins, Hugh V. Human Development and Learning. Calif.: Wadsworth Publishing Co., Inc., 1969.
- Pervin, Lawrence A. "The College as a Social System." Journal of Higher Education, Zerex copy, 317-322.
- Phenix, Philip H. "Introduction." Philosophies of Education. Edited by Philip H. Phenix. New York: John Wiley and Sons, Inc., 1962.
- Pintner, Rudolf, et al. Educational Psychology. 6th. ed. New York: Barnes and Noble, Inc., 1970.
- Platt, John. "What We Must Do." Age of Aquarius, Kenneth L. Jones, et al. Pacific Palasades, Calif.: Goodyear Pub. Co., Inc., 1971.
- President's Council on Physical Fitness. Fitness for Leadership. Washington: U. S. Government Printing Office, 1964.
- A Presidential Message to the Schools on the Physical Fitness of Youth. Remarks given by President John F. Kennedy at his press conference, July 20, 1961.
- Price, Kingsley. Education and Philosophical Thought. 2d. ed. Boston, Mass.: Allyn and Bacon, Inc., 1967.
- Pulaski, Mary Ann Spencer. Understanding Piaget. New York: Harper and Row, Publishers, 1971.
- Pullias, Earl V. "The Education of the Whole Man." Quest, I (December, 1963), 37-42.
- _____. Search for Understanding. Iowa: Wm. C. Brown Company, 1965.
- Raab, W. "Prevention of Degenerative Heart Disease by Physical Activity." Quest, III (December, 1964), 19-30.
- Rambo, William W. "Attitude Measurement." Perceptual Motor Skills, XXX (1970), 43-48.
- Rarick, G. Lawrence. "The Domain of Physical Education as a Discipline." Quest, IX (December, 1967), 49-52.

- Report of the Harvard Committee. General Education in a Free Society. Cambridge, Mass.: Harvard University Press, 1945.
- Report of the National Conference on Interpretation of Physical Education. Chicago, Ill.: The Athletic Institute, 1962.
- Report of the White House Conference on Youth. Washington: U. S. Government Printing Office, 1971.
- Ribicoff, Abraham. Remarks. Conference on Physical Education of Youth. Washington: American Association for Health, Physical Education, and Recreation, February 21, 1961.
- Rice, Emmett A., John L. Hutchinson, and Mabel Lee. Brief History of Physical Education. 5th. ed. New York: Ronald Press, 1969.
- Robb, Margaret D. The Dynamics of Motor-Skill Acquisition. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1972.
- Rogers, Carl R. On Becoming a Person. Boston, Mass.: Houghton Mifflin, 1961.
- _____. Freedom To Learn. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969.
- _____. "Some Issues Concerning the Control of Human Behavior." Science, CXXIV (November 30, 1954), 1-64.
- Rokeach, Milton. "Attitude Change and Behavioral Change." Public Opinion Quarterly, XXX (Winter, 1966), 529-550.
- _____. Beliefs, Attitudes, and Values: A Theory of Organization and Change. San Francisco, Calif.: Jossey-Boss Inc., 1968.
- Rosenblith, Judy F., and Wesley Allinsmith (eds.). The Causes of Behavior: Readings in Child Development and Educational Psychology. 2d. ed. Boston, Mass.: Allyn and Bacon, Inc., 1966.
- The Sacramento Bee, "Ike's Heart Doctor Asks Stress on Physical Fitness." (Associated Press), May 26, 1960.
- Sanborn, Marion A., and Betty G. Hartman. Issues in Physical Education. 2d. ed. Philadelphia, Pa.: Lea and Febiger, 1964.
- Sargent, S. Stansfeld. Basic Teachings of the Great Psychologists. Revised ed. "Dolphin Books". Garden City, N. Y.: Doubleday and Company, Inc., 1965.
- Seagoe, May V. A Teacher's Guide to the Learning Process. 2d. ed. Dubuque, Iowa: Wm. C. Brown Company, 1961.
- Selye, Hans. "The Wear and Tear of Life." Today's Health, XXXVII (January, 1959), 24.

- Sheehan, Thomas J. "Sport: The Focal Point of Physical Education." Quest, X (May, 1968), 59-67.
- Shepard, Natalie M. Foundations and Principles of Physical Education. New York: Ronald Press Co., 1960.
- Shvartz, Esar. "Nietzsche--Philosopher of Fitness." Quest, VIII (May, 1967), 83-89.
- Siegel, Laurence (ed.). Instruction. Some Contemporary Viewpoints. San Francisco: Chandler Publishing Co., 1967.
- Simonov, Pavel. "Dostoevsky as a Social Scientist." Psychology Today, X (December, 1971), No. 7, 59-61+.
- Singer, Robert. Motor Learning and Human Performance. New York: Macmillan Co., 1968.
- Singer, Robert W. et al. Physical Education: An Interdisciplinary Approach. New York: The Macmillan Company, 1972.
- Slusher, Howard S. "Existentialism and Physical Education." The Physical Educator, XX (December, 1963), 153-156.
- Slusher, Howard S., and Aileene S. Lockhart (eds.). Anthology of Contemporary Readings. Dubuque, Iowa: W. C. Brown Co., 1966.
- Slusher, Howard S. Man, Sport and Existence: A Critical Analysis. Philadelphia, Pa.: Lea and Febiger, 1967.
- Smith, Karl U. "Cybernetic Foundations of Physical Behavioral Science." Quest, VIII (May, 1967), 26-32.
- Spence, Dale. "What is the Deeper Meaning of Physical Education." The Physical Educator, XXI (May, 1964), 68-69.
- Stainbrook, Edward. "The Behavioral Sciences and the Nature of Man." Quest, III (December, 1964), 57-66.
- Stein, Julian A. "Making School Learned Physical Education a Continuing Force for Future Fitness." The Physical Educator, XX (October, 1963), 126-127.
- Steinhaus, Arthur. "The Disciplines Underlying a Profession." Quest, IX (December, 1967), 68-72.
- _____. "Significant Experiences--A Challenge to Physical Education." The Physical Educator, XIX (March, 1962), 5-11.
- _____. Toward an Understanding of Health and Physical Education. Dubuque, Iowa: Wm. C. Brown Company, 1963.
- Stenhouse, Lawrence. Culture and Education. New York: Webeight and Talley, 1967.

- Stoff, Sheldon, and Herbert Schwartzberg. The Human Encounter. New York: Harper and Row, Publishers, 1969.
- Stroup, Francis. "Physical Education and the Liberal Arts." The Physical Educator, XVI (December, 1959), 129-130.
- The Student in Higher Education. Report of the Committee on the Student in Higher Education. New Haven, Conn.: The Hazen Foundation, 1968.
- Stull, G. Alan, and Guy Lewis. "The Funeral Games of the Homeric Greeks." Quest, XI (December, 1968), 1-13.
- Swanson, Richard A. "The Acceptance and Influence of Play in American Protestantism." Quest, XI (December, 1968), 58-70.
- Taylor, A. E. Plato: the Man and His Work. London: Methuen, 1955.
- Taylor, Richard. Metaphysics. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963.
- Teachers College Record (1960-1966) and Harvard Educational Review (1964-1966) (eds.). Problems and Issues in Contemporary Education. Glenview, Ill.: Scott, Foresman and Company, 1968.
- Teilhard de Chardin, Pierre. The Phenomena of Man. "Harper Torch Book." New York: Harper and Brothers, 1961.
- Thornton, James W., Jr. The Community Junior College. 2d. ed. New York: Wiley and Sons, Inc., 1966.
- Tillich, Paul. "Existential Philosophy." Journal of the History of Ideas, V (January, 1944), 44-70.
- Titus, Harold H. Living Issues in Philosophy. 4th. ed. New York: American Book Co., 1964.
- Toffler, Alvin. Future Shock. "Bantam Books." New York: Random House, Inc., 1970.
- Torpey, James. "A Conditioned Body and Survival." The Physical Educator, XVIII (May, 1961), 63-64.
- Travers, John F. Learning: Analysis and Application. New York: David McKay Co., Inc., 1965.
- Turner, Edward T. "Physical Education: A Paradoxical Phenomenon." The Physical Educator, XXV (December, 1968), 174-176.
- Tutko, Thomas A. "Some Clinical Aspects of Sports Psychology." Quest, XIII (January, 1970), 12-17.
- Ulrich, Celeste. The Social Matrix of Physical Education. New Jersey: Prentice-Hall, Inc., 1968.

- Unpublished results of tests given to entering college freshmen from 1962-1968 at Phillips University, Enid, Oklahoma, by the author.
- Unpublished results of the "Student Physical Activity Inventory" given to 46 physical education classes at Oklahoma State University, Stillwater, Oklahoma, 1971-1972, by Jo Oliver.
- Updyke, Wynn F., and Perry B. Johnson. Principles of Modern Physical Education, Health, and Recreation. New York: Holt, Rinehart and Winston, Inc., 1970.
- Van Dalen, D. B. "Philosophical Profiles for Physical Educators." The Physical Educator, XXI (October, 1964), 113-115.
- Vanderzwaag, Harold J. "Essentialism and Physical Education." The Physical Educator, XX (December, 1963), 147-149.
- _____. "Sport: Existential or Essential." Quest, XXI (May, 1969), 47-56.
- _____. Toward a Philosophy of Sport. Reading, Mass.: Addison-Wesley Publishing Company, 1972.
- Van Doren, Mark. Liberal Education. Boston, Mass.: Beacon Press, eighth printing, June, 1967.
- Van Huss, Wayne, et al. Physical Activity in Modern Living. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1960.
- Vannier, Maryhelen, and Hollis F. Fait. Teaching Physical Education in Secondary Schools. 3rd. ed. Philadelphia, Pa.: W. B. Saunders Company, 1969.
- Wadsworth, Homer C. Summary of Group Discussions. Conference on Physical Fitness of Youth. Washington, D. C.: American Association for Health, Physical Education and Recreation, February 21, 1961.
- Webster, R. W. Philosophy of Physical Education. Dubuque, Iowa: Wm. C. Brown Company, 1965.
- Weston, Arthur. Making of American Physical Education. New York: Appleton-Century-Crofts, 1962.
- White, Paul Dudley. The American Weekly, (January 4, 1959), 4.
- _____. "A Plea for the Health of our College Men and Women." Quest, III (December, 1964), 1.
- Whitehead, Alfred North. The Function of Reason. Boston, Mass.: Beacon Press, 1929.
- Whyte, William F. "Pigeons, Persons and Piece Rates." Psychology Today, V (April, 1972), No. 11, 66-68+.

- Willgoose, Carl E. The Curriculum in Physical Education. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1969.
- Williams, Jesse F. The Principles of Physical Education. 8th. ed. Philadelphia, Pa.: W. B. Saunders Co., 1964.
- Willis, Joe D., and Don R. Bethe. "Achievement Motivation: Implications for Physical Activity." Quest, XIII (January, 1970), 18-22.
- Wilson, John Rowan, and the Editors of Time-Life Books. The Mind. Life Science Library. New York: Time, Inc., 1969.
- Wireman, Billy O. "What are the Underlying Values in Physical Education?" The Physical Educator, XXII (May, 1965), 53-56.
- Wolff, Harold G. What Hope Does for Man. New York: State Committee on Tuberculosis and Physical Health and the New York State Heart Assembly, Inc., 1959.
- Wright, Ted. "Retention of Learning Findings and the Physical Educator." The Physical Educator, XXIV (December, 1967), 152-153.
- Young, Kenneth E. "Physical Education and the Academic Emphasis." The Physical Educator, XXI (March, 1964), No. 1, 3-4.
- Zajong, Robert B. "The Concepts of Balance, Congruity, and Dissonance." Public Opinion Quarterly, XXIV (Summer, 1960), No. 2, 280-296.
- Zeigler, Earle F. "Implications of Experimentalism for Physical, Health, and Recreation Education." The Physical Educator, XX (December, 1963), 150-152.
- _____. Philosophical Foundations for Physical, Health, and Recreation Education. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1964.
- _____. Problems in the History and Philosophy of Physical Education and Sport. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1968.
- _____. "Summary and Discussion." The Physical Educator, XX (December, 1963), 156.

VITA

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Candidate for the Degree of

Doctor of Education

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Professional Experience: Teacher in the public schools in Enid, Oklahoma from 1941-51 as a physical education teacher for four years and as a third grade classroom teacher for three years; chairman of the women's program in the Division of Health, Physical Education and Recreation at Phillips University from 1951-1970; assistant coordinator of the teacher education program in the Health, Physical Education and Recreation Department at Oklahoma State University from 1970-present; Camp counselor, director summer camps in Oklahoma, Ohio, and Minnesota from 1937-52. Teacher in American Red Cross National Aquatic Schools during summers, 1951-54.

Professional Organizations and Activities: Member of National and Oklahoma Education Associations; member of National and Southern Associations for Physical Education for College Women; member of American and Oklahoma Associations for the Health, Physical Education and Recreation (Oklahoma president, 1960, also served as Vice-president of Physical Education, Vice-president of Health, and College Division Chairman); member of Oklahoma Recreation and Park Society; member of Oklahoma Curriculum Improvement Commission's Committee for the Improvement of Physical Education Programs in Oklahoma; member of numerous committees at Phillips University (such as, Curriculum and Educational Policies Committee, Teacher Education Council, Task Force on General Education, University Objectives Committee, and University Health and Welfare Committee).

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